


3176. 3333/3597











Digitized by the Internet Archive  
in 2013















The Victoria History of the  
Counties of England

EDITED BY H. ARTHUR DOUBLEDAY F.R.G.S.

A HISTORY OF  
HAMPSHIRE  
AND THE ISLE  
OF WIGHT

VOLUME I



A HISTORY OF HAMPSHIRE  
AND THE ISLE OF WIGHT  
VOLUMES I AND II EDITED BY  
H. ARTHUR DOUBLEDAY F.R.G.S.  
VOLUMES III AND IV EDITED BY  
G. HENNIKER GOTLEY M.A.  
AND W. J. HARDY F.S.A.



THE  
VICTORIA HISTORY  
OF THE COUNTIES  
OF ENGLAND

HAMPSHIRE AND  
THE ISLE OF WIGHT



WESTMINSTER  
ARCHIBALD CONSTABLE  
AND COMPANY LIMITED

49235  
7/12/00

*This History is issued to Subscribers only  
By Archibald Constable & Company Limited  
and printed by Butler & Tanner of  
Frome and London*



TO

**VICTORIA**

BY THE GRACE OF GOD  
OF THE UNITED KINGDOM  
OF GREAT BRITAIN  
AND IRELAND

**QUEEN**

**EMPRESS OF INDIA**

THIS HISTORY IS BY  
GRACIOUS PRIVILEGE  
DEDICATED





# THE ADVISORY COUNCIL OF THE VICTORIA HISTORY

HIS GRACE THE DUKE OF DEVONSHIRE, K.G.  
*Chancellor of the University of Cambridge*

HIS GRACE THE DUKE OF RUTLAND, K.G.

HIS GRACE THE DUKE OF PORTLAND

HIS GRACE THE DUKE OF ARGYLL, K.T.

THE MOST NOBLE THE MARQUESS OF SALISBURY,  
K.G.  
*Chancellor of the University of Oxford*

THE RT. HON. THE EARL OF ROSEBERY, K.G.,  
K.T.

THE RT. HON. THE EARL OF COVENTRY  
*President of the Royal Agricultural Society*

THE RT. HON. THE VISCOUNT DILLON  
*President of the Society of Antiquaries*

THE LORD BISHOP OF LONDON

THE LORD BISHOP OF OXFORD

THE RT. HON. THE LORD ACTON  
*Regius Professor of Modern History, Cambridge*

THE RT. HON. THE LORD LISTER  
*President of the Royal Society*

SIR FREDERICK POLLOCK, BART., LL.D., F.S.A., ETC.  
*Corpus Professor of Jurisprudence, Oxford*

SIR EDWARD MAUNDE THOMPSON, K.C.B., D.C.L.,  
LL.D., F.S.A., ETC.  
*Director of the British Museum*

SIR CLEMENTS R. MARKHAM, K.C.B., F.R.S., F.S.A.  
*President of the Royal Geographical Society*

SIR HENRY MAXWELL-LYTE, K.C.B., M.A., F.S.A.,  
ETC.  
*Keeper of the Public Records*

COL. SIR J. FARQUHARSON, K.C.B.

SIR JOS. HOOKER, G.C.S.I., M.D., D.C.L., F.R.S.,  
ETC.

SIR ARCHIBALD GEIKIE, LL.D., F.R.S., ETC.  
*Director of the Geological Survey*

REV. J. CHARLES COX, LL.D., F.S.A., ETC.

LIONEL CUST, ESQ., M.A., F.S.A., ETC.  
*Director of the National Portrait Gallery*

DR. ALBERT L. G. GUNTHER, F.R.S.  
*President of the Linnean Society*

COL. DUNCAN A. JOHNSTON  
*Director General of the Ordnance Survey*

PROF. E. RAY LANKESTER, M.A., F.R.S., ETC.  
*Director of the Nat. Hist. Museum, South Kensington*

F. YORK POWELL, ESQ., M.A., F.S.A., ETC.  
*Regius Professor of Modern History, Oxford*

J. HORACE ROUND, ESQ., M.A.

WALTER RYE, ESQ.

W. H. ST. JOHN HOPE, ESQ., M.A.  
*Assistant Secretary of the Society of Antiquaries*

*Honorary Secretary*—AUBYN B. R. TREVOR-BATTYE, M.A., F.L.S., ETC.

---

## GENERAL ADVERTISEMENT

THE VICTORIA HISTORY of the Counties of England is a National Survey showing the condition of the country at the present day, and tracing the domestic history of the English Counties back to the earliest times.

Rich as every County of England is in materials for local history, there has hitherto been no attempt made to bring all these materials together into a coherent form. There are, indeed, histories of English Counties; but many of them—and these the best—are exceedingly rare and costly; others are very imperfect; all are out of date.

THE VICTORIA HISTORY will trace, county by county, the story of England's growth from its prehistoric condition, through the barbarous age, the settlement of alien peoples, and the gradual welding of many races into a nation which is now the greatest on the globe. All the phases of ecclesiastical history; the changes in land tenure; the records of historic and local families; the history of the social life and sports of the villages and towns; the development of art, science, manufactures and industries—all these factors, which tell of the progress of England from primitive beginnings to large and successful empire, will find a place in the work and their treatment be entrusted to those who have made a special study of them.

Many archæological, historical and other Societies are assisting in the compilation of this work, and the editor also has the advantage of the active and cordial co-operation of The

National Trust, which is doing so much for the preservation of places of historic interest and natural beauty throughout the country.

The names of the distinguished men who have joined the Advisory Council are a guarantee that the work will represent the results of the latest discoveries in every department of research. It will be observed that among them are representatives of science; for the whole trend of modern thought, as influenced by the theory of evolution, favours the intelligent study of the past and of the social, institutional and political developments of national life. As these histories are the first in which this object has been kept in view, and modern principles applied, it is hoped that they will form a work of reference no less indispensable to the student than welcome to the man of culture.

Family History will, both in the Histories and in the supplemental volumes of chart pedigrees, be dealt with by genealogical experts and in the modern spirit. Every effort will be made to secure accuracy of statement, and to avoid the insertion of those legendary pedigrees which have in the past brought discredit on the whole subject. It has been pointed out by the Bishop of Oxford, a great master of historical research, that 'the expansion and extension of genealogical study is a very remarkable feature of our own times,' that 'it is an increasing pursuit both in America and England,' and that it can render the historian useful service.

Heraldry will also in this Series occupy a prominent position, and the splendours of the coat-armour borne in the Middle Ages will be illustrated in colours on a scale that has never been attempted before.

The general plan of Contents, and the names of the Sectional Editors (who will co-operate with local workers in every case) are as follows :—

Natural History. Edited by AUBYN B. R. TREVOR-BATTYE, M.A., F.L.S., etc.

Geology. By Various Authorities

Palæontology. Edited by R. L. LYDEKKER, F.R.S., etc.

Flora { Contributions by G. A. BOULENGER, F.R.S., F. O. PICKARD-CAMBRIDGE, M.A., WALTER GARSTANG,  
HERBERT GOSS, F.L.S., F.E.S., R. I. POCKOCK, REV. T. R. R. STEBBING, M.A., F.R.S., etc.,  
Fauna { B. B. WOODWARD, F.G.S., F.R.M.S., etc., and other Specialists

Prehistoric Remains. Edited by W. BOYD DAWKINS, M.A., F.R.S., F.S.A.

Roman Remains. Edited by F. HAVERFIELD, M.A., F.S.A.

Anglo-Saxon Remains. Edited by C. HERCULES READ, F.S.A., and REGINALD A. SMITH, B.A.

Ethnography. Edited by G. LAURENCE GOMME, F.S.A.

Dialect. Edited by JOSEPH WRIGHT, M.A., Ph.D.

Place Names

Folklore

Physical Types

} Contributed by Various Authorities

Domesday Book and other kindred Records. Edited by J. HORACE ROUND, M.A.

Architecture. The Sections on the Cathedrals and Monastic Remains. Edited by W. H. ST. JOHN HOPE, M.A.

Ecclesiastical History } By Various Authorities

Political History }

History of Schools. By A. F. LEACH, M.A., F.S.A.

Maritime History of Coast Counties. Edited by J. K. LAUGHTON, M.A.

Topographical Accounts of Parishes and Manors. By Various Authorities

History of the Feudal Baronage. Edited by J. HORACE ROUND, M.A., and OSWALD BARRON

Family History and Heraldry. Edited by OSWALD BARRON

Agriculture. Edited by SIR ERNEST CLARKE, M.A., Sec. to the Royal Agricultural Society

Industries, Arts, and Manufactures

Social and Economic History

Persons Eminent in Art, Literature, Science

} By Various Authorities

Ancient and Modern Sport. Edited by the DUKE OF BEAUFORT

Fishing. Edited by H. CHOLMONDELEY PENNELL

Cricket. Edited by HOME GORDON

Football. Edited by C. W. ALCOCK

Bibliographies



With a view to securing the best advice with regard to the searching of records, the Editor has secured the services of the following committee of experts :—

#### RECORDS COMMITTEE

THE RT. REV. THE LORD BISHOP OF OXFORD	STUART MOORE, M.A., F.S.A.
SIR EDWARD MAUNDE THOMPSON, K.C.B.	WM. PAGE, F.S.A.
SIR HENRY MAXWELL-LYTE, K.C.B.	J. HORACE ROUND, M.A.
W. J. HARDY, F.S.A.	S. R. SCARGILL-BIRD, M.A., F.S.A.
F. MADAN, M.A.	W. H. STEVENSON, M.A.
F. W. MAITLAND, LL.D.	G. F. WARNER, M.A., F.S.A.

#### ILLUSTRATIONS

Among the many thousands of subjects illustrated will be castles, cathedrals and churches, mansions and manor houses, moot halls and market halls, family portraits, etc. Particular attention will be given to the beautiful and quaint examples of architecture which, through decay or from other causes, are in danger of disappearing. The best examples of church brasses, coloured glass, and monumental effigies will be depicted. The Series will also contain 160 pictures in photogravure, showing the characteristic scenery of the counties.

#### CARTOGRAPHY

Each History will contain Archæological, Domesday, and Geological maps ; maps showing the orography, and the Parliamentary and Ecclesiastical divisions ; and the map done by Speed in 1610. The Series will contain about four hundred maps in all.

#### FAMILY HISTORY AND HERALDRY

The Histories will contain, in the Topographical Section, manorial pedigrees, and accounts of the noble and gentle families connected with the local history ; and it is proposed to trace, wherever possible, their descendants in the Colonies and the United States of America. The Editor will be glad to receive information which may be of service to him in this branch of the work. The chart family pedigrees and the arms of the families mentioned in the Heralds' Visitations will be issued in a supplemental volume for each county.

The Rolls of Arms are being completely collated for this work, and all the feudal coats will be given in colours. The arms of the local families will also be represented in connection with the Topographical Section.

In order to secure the greatest possible accuracy in the descriptions of the Architecture, ecclesiastic, military and domestic, a committee has been formed of the following students of architectural history, who will supervise this department of the work :—

#### ARCHITECTURAL COMMITTEE

J. BILSON, F.S.A., F.R.I.B.A.	W. H. ST. JOHN HOPE, M.A.
R. BLOMFIELD	W. H. KNOWLES, F.S.A., F.R.I.B.A.
HAROLD BRAKSPEAR, A.R.I.B.A.	J. T. MICKLETHWAITE, F.S.A.
PROF. BALDWIN BROWN	ROLAND PAUL
ARTHUR S. FLOWER, F.S.A., A.R.I.B.A.	J. HORACE ROUND, M.A.
GEORGE E. FOX, M.A., F.S.A.	PERCY G. STONE, F.S.A., F.R.I.B.A.
J. A. GOTCH, F.S.A., F.R.I.B.A.	THACKERAY TURNER

A special feature in connection with the Architecture will be a series of coloured ground plans showing the architectural history of castles, cathedrals, and other monastic foundations. Plans of the most important country mansions will also be included.

*The issue of this work is limited to subscribers only, whose names will be printed at the end of each History.*









In the city of New York

N.H.

A HISTORY OF  
**HAMPSHIRE**  
AND THE ISLE  
OF WIGHT

VOLUME ONE



**WESTMINSTER**  
2 WHITEHALL GARDENS  
1900



DA  
670  
H2H5  
v. 1

# COUNTY COMMITTEE FOR HAMPSHIRE AND THE ISLE OF WIGHT

H.R.H. THE PRINCESS BEATRICE (Princess Henry of Battenberg)

*Governor of the Isle of Wight*

THE RT. HON. THE EARL OF NORTHBROOK, G.C.S.I.

*Lord-Lieutenant, Chairman*

HIS GRACE THE DUKE OF WELLINGTON  
THE RT. HON. THE EARL OF PORTSMOUTH  
THE RT. HON. THE EARL OF MALMESBURY

THE RT. HON. EVELYN MELBOURNE ASHLEY  
COL. THE HON. H. G. L. CRICHTON  
THE HON. GERALD W. LASCELLES  
SIR ANTHONY COPE, BART.  
SIR CHARLES SHELLEY, BART.  
SIR RICHARD N. RYCROFT, BART.,  
HIGH SHERIFF OF THE COUNTY  
SIR SAMUEL MONTAGUE, BART., M.P.  
SIR FRANCIS SEYMOUR HADEN, P.R.E.,  
F.R.C.S.

ARTHUR F. JEFFREYS, ESQ., M.P., J.P.,  
D.L.

WM. G. NICHOLSON, ESQ., M.P., J.P.  
THE RT. REV. THE BISHOP OF SOUTHAMPTON

THE VERY REV. THE DEAN OF WINCHESTER, F.S.A.

THE REV. THE WARDEN OF WINCHESTER

J. W. BAKENDALE, ESQ., J.P., D.L.

THE REV. W. BENHAM, B.D., F.S.A.,  
HON. CANON OF CANTERBURY

REV. R. F. BIGG-WITHER  
THE REV. A. C. BLUNT, HON. CANON  
OF WINCHESTER

THE RT. HON. THE EARL OF NORTHBROOK, G.C.S.I.

THE RT. HON. THE VISCOUNT BARING

THE RT. REV. THE BISHOP OF WINCHESTER

J. BONHAM-CARTER, ESQ., J.P., D.L.  
A. BOWKER, ESQ., J.P.

THE REV. W. G. CAZALET  
TANKERVILLE CHAMBERLAYNE, ESQ.,  
J.P.

EYRE COOTE, ESQ., J.P.  
COL. CORNWALLIS-WEST, J.P.

LT.-COL. DAWSON, F.R.G.S.  
A. C. DRUMMOND, ESQ., J.P., D.L.

ROBERT EAST, ESQ.  
A. T. EVERITT, ESQ.

THE REV. W. A. FEARON, D.D.  
J. WILLIS FLEMING, ESQ., J.P.

THE REV. G. N. GODWIN  
R. W. GRIFFITH, ESQ., J.P.

COL. H. B. HANNA  
DR. W. M. HARMAN

THE REV. T. HERVEY  
THE REV. J. E. KELSALL

T. F. KIRBY, ESQ., F.S.A.  
MONTAGU G. KNIGHT, ESQ., D.L.

H. LEROY-LEWIS, ESQ., F.R.G.S.  
THE REV. G. W. MINNS, LL.B.,  
F.S.A.

W. J. C. MOENS, ESQ., F.S.A., J.P.

MELVILLE PORTAL, ESQ., J.P., D.L.

THE RT. HON. THE LORD CALTHORPE  
THE RT. HON. THE LORD BOLTON  
THE RT. HON. THE LORD ABERDARE  
THE RT. HON. THE LORD MONTAGU  
OF BEAULIEU  
THE RT. HON. THE LORD BASING

WYNDHAM S. PORTAL, ESQ., J.P.,  
D.L.

W. W. PORTAL, ESQ., J.P.  
G. T. ROFER, ESQ.

THE REV. G. C. STENNING  
H. W. TRINDER, ESQ.

THE REV. C. S. WARD  
THE REV. R. A. R. WHITE, M.A.,  
F.R.G.S.

CHARLES WOOLDRIDGE, ESQ.

THE WORSHIPFUL THE MAYOR OF  
ANDOVER

THE WORSHIPFUL THE MAYOR OF  
BASINGSTOKE

THE WORSHIPFUL THE MAYOR OF  
BOURNEMOUTH

THE WORSHIPFUL THE MAYOR OF  
CHRISTCHURCH

THE WORSHIPFUL THE MAYOR OF  
LYMINGTON

THE WORSHIPFUL THE MAYOR OF  
PORTSMOUTH

THE WORSHIPFUL THE MAYOR OF  
SOUTHAMPTON

THE WORSHIPFUL THE MAYOR OF  
WINCHESTER

## ISLE OF WIGHT

LT.-GEN. THE HON. SOMERSET J. G. CALTHORPE

THE HON. JOHN G. PRENDERGAST  
VEREKER, LL.D.

GODFREY BARING, ESQ., J.P.  
THOS. B. H. COCHRANE, ESQ., J.P.,  
D.L., DEPUTY GOVERNOR OF THE  
ISLE OF WIGHT

THE REV. G. E. JEANS, F.S.A.

JOHN H. OGLANDER, ESQ., LL.B.,  
F.S.A., J.P.

COL. HENRY GEORGE BROWNE, V.C.,  
J.P.

LT.-COL. RICHARD P. CROZIER, J.P.,  
D.L.

GEORGE HENRY ROQUÉ DABBS, ESQ.,  
M.D., J.P.

THE REV. R. G. DAVIS  
JOHN LEWIS FFYTCH, ESQ., F.S.A.

HENLY GROSE-SMITH, ESQ., J.P.  
WM. SMITH NICHOLSON, ESQ., M.A.,  
J.P.

PERCY G. STONE, ESQ., F.S.A.,  
F.R.I.B.A.

ROWLAND PROTHERO, ESQ.  
THE REV. E. SUMMERS

JOHN LIVESSEY WHITEHEAD, ESQ.,  
M.D., J.P.

THE WORSHIPFUL THE MAYOR OF  
NEWPORT

THE WORSHIPFUL THE MAYOR OF  
RYDE

*Honorary Secretary to the County Committee: THE RT. HON. THE EARL OF MALMESBURY*





# CONTENTS OF VOLUME ONE

	PAGE
Dedication . . . . .	v
The Advisory Council of the Victoria History . . . . .	vii
General Advertisement . . . . .	vii
The Hampshire and Isle of Wight County Committee . . . . .	xiii
Contents . . . . .	xv
List of Illustrations . . . . .	xvii
Preface . . . . .	xix
Natural History . . . . . Edited by AUBYN TREVOR-BATTYE, M.A., F.L.S. :—	
Introduction to Natural History . . . . . By A. TREVOR-BATTYE, M.A., F.L.S. . . . .	1
Geology . . . . . By CLEMENT REID, F.R.S., F.L.S., F.G.S. . . . .	11
Palæontology . . . . . By RICHARD L. LYDEKKER, B.A., F.R.S., F.G.S. . . . .	41
Botany . . . . . By FREDERICK TOWNSEND, M.A., F.L.S. . . . .	47
Rubi and Rosæ ( <i>Brambles and</i> <i>Roses</i> ) . . . . . By the Rev. W. MOYLE ROGERS, F.L.S. . . . .	69
Musci and Hepaticæ ( <i>Mosses and</i> <i>Liverworts</i> ) . . . . . By H. N. DIXON, F.L.S. . . . .	71
Lichenes ( <i>Lichens</i> ) . . . . . By W. H. WILKINSON, F.L.S. . . . .	75
Algæ . . . . . By E. M. HOLMES, F.L.S. . . . .	79
Fungi . . . . . By the Rev. W. L. W. EYRE . . . . .	82
Marine Zoology . . . . . By WALTER GARSTANG, M.A., F.L.S. . . . .	89
Mollusca ( <i>Whelks, Oysters, Snails, etc.</i> ) . . . . . By B. B. WOODWARD, F.G.S., F.R.M.S., and L. E. ADAMS, B.A. . . . .	103
Insecta ( <i>Insects</i> ) . . . . . Edited by HERBERT GOSS, F.L.S., F.E.S. . . . .	109
Orthoptera ( <i>Grasshoppers, etc.</i> ) . . . . . By MALCOLM BURR, F.Z.S., F.E.S. . . . .	109
Neuroptera ( <i>Dragonflies</i> ) and Trichoptera ( <i>Caddis-flies</i> ) . . . . . By ROBERT McLACHLAN, F.R.S., F.L.S., J. J. F. X. KING, F.E.S., and KENNETH MORTON, F.E.S. . . . .	112
Hymenoptera, Aculeata ( <i>Bees, etc.</i> ) . . . . . By EDWARD SAUNDERS, F.L.S. . . . .	114
Hymenoptera, Phytophaga . . . . . By ETHEL F. CHAWNER, F.E.S. . . . .	118
Coleoptera ( <i>Beetles</i> ) . . . . . By the Rev. CANON FOWLER, M.A., F.L.S., and JAMES J. WALKER, R.N., F.L.S. . . . .	121

# CONTENTS OF VOLUME ONE

	PAGE
Lepidoptera, Rhopalocera	
( <i>Butterflies</i> ) . . . . .	By HERBERT GOSS, F.L.S., F.E.S., assisted by W. H. B. FLETCHER, M.A., F.E.S., and Capt. SAVILE REID, F.E.S., late R.E. . . . . 130
Lepidoptera, Heterocera ( <i>Moths</i> )	
Nocturni, Geometræ, Drepanulæ, Pseudo-Bombyces, Noctuæ, Deltoides, Pyralides and Crambites . . . . .	By HERBERT GOSS, F.L.S., F.E.S., assisted by W. H. B. FLETCHER, M.A., F.E.S., and Capt. SAVILE REID, F.E.S., late R.E. . . . . 134
Tortrices, Tineæ, and Pterophori . . . . .	By PERCY M. BRIGHT, F.E.S., assisted by EUSTACE R. BANKES, M.A., F.E.S., CHAS. G. BARRETT, F.E.S., and W. H. B. FLETCHER, M.A., F.E.S. 146
Diptera ( <i>Flies</i> ) . . . . .	By FREDERICK C. ADAMS, F.E.S. . . . . 154
Hemiptera Heteroptera ( <i>Bugs</i> ) . . . . .	By EDWARD SAUNDERS, F.L.S. . . . . 160
Hemiptera Homoptera ( <i>Cicadas</i> ) . . . . .	By JAMES EDWARDS, F.E.S. . . . . 162
Myriapoda ( <i>Centipedes, etc.</i> ) . . . . .	By R. I. POCKOCK . . . . . 163
Arachnida ( <i>Spiders, Scorpions, etc.</i> ) . . . . .	By F. O. PICKARD-CAMBRIDGE, M.A. . . . . 165
Crustacea ( <i>Crabs, Lobsters, etc.</i> ) . . . . .	By the Rev. T. R. R. STEBBING, M.A., F.R.S., F.L.S. 185
Pisces ( <i>Fishes</i> ) . . . . .	By G. A. BOULENGER, F.R.S., F.Z.S. . . . . 197
Amphibia ( <i>Amphibians</i> ) and	
Reptilia ( <i>Reptiles</i> ) . . . . .	" " " . . . . . 204
Aves ( <i>Birds</i> ) . . . . .	By EDMUND G. B. MEADE-WALDO, F.Z.S., M.B.O.U. 208
Mammalia ( <i>Mammals</i> ) . . . . .	By A. TREVOR-BATTYE, M.A., F.L.S., assisted by the Hon. GERALD LASCELLES, B.A., F.Z.S. . 239
Early Man . . . . .	By W. BOYD DAWKINS, M.A., F.R.S., F.S.A. . 253
Romano-British Remains . . . . .	By F. HAVERFIELD, M.A., F.S.A. . . . . 265
Silchester . . . . .	By GEORGE E. FOX, M.A., F.S.A., and W. H. ST. JOHN HOPE, M.A. . . . . 350
Anglo-Saxon Remains . . . . .	By REGINALD A. SMITH, B.A. . . . . 373
Introduction to the Hampshire	
Domesday . . . . .	By J. HORACE ROUND, M.A. . . . . 399
The Text of the Hampshire Domesday . . . . .	" " . . . . . 448
The Winchester Survey . . . . .	" " . . . . . 527

# CONTENTS OF VOLUME ONE

	PAGE
Dedication . . . . .	v
The Advisory Council of the Victoria History . . . . .	vii
General Advertisement . . . . .	vii
The Hampshire and Isle of Wight County Committee . . . . .	xiii
Contents . . . . .	xv
List of Illustrations . . . . .	xvii
Preface . . . . .	xix
Natural History . . . . . Edited by AUBYN TREVOR-BATTYE, M.A., F.L.S. :—	
Introduction to Natural History . . . . . By A. TREVOR-BATTYE, M.A., F.L.S. . . . .	1
Geology . . . . . By CLEMENT REID, F.R.S., F.L.S., F.G.S. . . . .	11
Palæontology . . . . . By RICHARD L. LYDEKKER, B.A., F.R.S., F.G.S. . . . .	41
Botany . . . . . Edited by FREDERICK TOWNSEND, M.A., F.L.S. . . . .	47
Rubi and Rosæ ( <i>Brambles and Roses</i> ) . . . . . By the Rev. W. MOYLE ROGERS, F.L.S. . . . .	69
Musci and Hepaticæ ( <i>Mosses and Liverworts</i> ) . . . . . By H. N. DIXON, F.L.S. . . . .	71
Lichenes ( <i>Lichens</i> ) . . . . . By W. H. WILKINSON, F.L.S. . . . .	75
Algæ . . . . . By E. M. HOLMES, F.L.S. . . . .	79
Fungi . . . . . By the Rev. W. L. W. EYRE . . . . .	82
Marine Zoology . . . . . By WALTER GARSTANG, M.A., F.L.S. . . . .	89
Mollusca ( <i>Whelks, Oysters, Snails, etc.</i> ) . . . . . By B. B. WOODWARD, F.G.S., F.R.M.S., and L. E. ADAMS, B.A. . . . .	103
Insecta ( <i>Insects</i> ) . . . . . Edited by HERBERT GOSS, F.L.S., F.E.S. . . . .	109
Orthoptera ( <i>Grasshoppers, etc.</i> ) . . . . . By MALCOLM BURR, F.Z.S., F.E.S. . . . .	109
Neuroptera ( <i>Dragonflies</i> ) and Trichoptera ( <i>Caddis-flies</i> ) . . . . . By ROBERT McLACHLAN, F.R.S., F.L.S., J. J. F. X. KING, F.E.S., and KENNETH MORTON, F.E.S. . . . .	112
Hymenoptera, Aculeata ( <i>Bees, etc.</i> ) . . . . . By EDWARD SAUNDERS, F.L.S. . . . .	114
Hymenoptera, Phytophaga . . . . . By ETHEL F. CHAWNER, F.E.S. . . . .	118
Coleoptera ( <i>Beetles</i> ) . . . . . By the Rev. CANON FOWLER, M.A., F.L.S., and JAMES J. WALKER, R.N., F.L.S. . . . .	121



# CONTENTS OF VOLUME ONE

	PAGE
Lepidoptera, Rhopalocera	
( <i>Butterflies</i> ) . . . . .	By HERBERT GOSS, F.L.S., F.E.S., assisted by W. H. B. FLETCHER, M.A., F.E.S., and Capt. SAVILE REID, F.E.S., late R.E. . . . . 130
Lepidoptera, Heterocera ( <i>Moths</i> )	By PERCY M. BRIGHT, F.E.S., assisted by EUSTACE R. BANKES, M.A., F.E.S., CHAS. G. BARRETT, F.E.S., and W. H. B. FLETCHER, M.A., F.E.S. 134
Diptera ( <i>Flies</i> ) . . . . .	By FREDERICK C. ADAMS, F.E.S. . . . . 154
Hemiptera Heteroptera ( <i>Bugs</i> ) . . . . .	By EDWARD SAUNDERS, F.L.S. . . . . 160
Hemiptera Homoptera ( <i>Cicadas</i> ) . . . . .	By JAMES EDWARDS, F.E.S. . . . . 162
Myriapoda ( <i>Centipedes, etc.</i> ) . . . . .	By R. I. POCKOCK . . . . . 163
Arachnida ( <i>Spiders, Scorpions, etc.</i> ) . . . . .	By F. O. PICKARD-CAMBRIDGE, M.A. . . . . 165
Crustacea ( <i>Crabs, Lobsters, etc.</i> ) . . . . .	By the Rev. T. R. R. STEBBING, M.A., F.R.S., F.L.S. 185
Pisces ( <i>Fishes</i> ) . . . . .	By G. A. BOULENGER, F.R.S., F.Z.S. . . . . 197
Amphibia ( <i>Amphibians</i> ) and	
Reptilia ( <i>Reptiles</i> ) . . . . .	” ” ” . . . . . 204
Aves ( <i>Birds</i> ) . . . . .	By EDMUND G. B. MEADE-WALDO, F.Z.S., M.B.O.U. 208
Mammalia ( <i>Mammals</i> ) . . . . .	By A. TREVOR-BATTYE, M.A., F.L.S., assisted by the Hon. GERALD LASCELLES, B.A., F.Z.S. . 239
Early Man . . . . .	By W. BOYD DAWKINS, M.A., F.R.S., F.S.A. . 253
Romano-British Remains . . . . .	By F. HAVERFIELD, M.A., F.S.A. . . . . 265
Silchester . . . . .	By GEORGE E. FOX, M.A., F.S.A., and W. H. ST. JOHN HOPE, M.A. . . . . 350
Anglo-Saxon Remains . . . . .	By REGINALD A. SMITH, B.A. . . . . 373
Introduction to the Hampshire	
Domesday . . . . .	By J. HORACE ROUND, M.A. . . . . 399
The Text of the Hampshire Domes-	
day . . . . .	” ” . . . . . 448
The Winchester Survey . . . . .	” ” . . . . . 527

## LIST OF ILLUSTRATIONS

	PAGE
On the Edge of the New Forest. By WILLIAM HYDE . . . . .	<i>Frontispiece</i>
Hampshire in Pleistocene Age . . . . .	253
Hampshire in Neolithic and probably also in Bronze Age . . . . .	257
Submarine Forest, Southampton Dock . . . . .	258
Bronze Tankard from Elveden . . . . .	267
Gold Coins of the British Chief Epillus Rex Calle . . . . .	273
Diagram showing Restoration of Pattern of Painted Wall Plaster at Silchester	<i>full-page plate, facing p. 274</i>
Inscribed Tile from Silchester . . . . .	275
Three Plans of Christian Churches of the Basilican Type . . . . .	277
The Silchester Ogam . . . . .	279
Dedication to Hercules Saegon . . . . .	280
Inscribed Fragments found at Silchester . . . . .	<i>full-page plate, facing p. 280</i>
"          "          " . . . . .	282
Circular Bronze Objects from Silchester and High Rochester . . . . .	282
Gold Ring found at Silchester . . . . .	283
Leaden Seal found at Silchester . . . . .	284
Plan of Winchester . . . . .	<i>full-page plate, facing p. 286</i>
Farm Building near Redenham . . . . .	294
Plan of a Roman House at Clanville, Andover . . . . .	296
Pewter Vessels from the 'Villa,' near Weyhill . . . . .	299
Ornamentation of Pewter Vessels found near Weyhill . . . . .	301
Buildings at Castlefield . . . . .	302
Finkley . . . . .	303
Mosaic Floors, Bramdean . . . . .	<i>full-page plate, facing p. 308</i>
Holbury . . . . .	312
The Roman Villa at Brading . . . . .	313
Mosaic Floor in the Brading Villa, Room III. . . . .	<i>full-page plate, facing p. 314</i>
Mosaic from the Brading Villa . . . . .	314
Mosaic Floor in the Brading Villa, Room XII. . . . .	<i>full-page plate, facing p. 316</i>
Plan of the Roman Villa at Carisbrooke . . . . .	316
Floor of Room D in the Roman Villa at Carisbrooke . . . . .	317
Fragments of Pottery from the New Forest . . . . .	327
Plan of Porchester . . . . .	329
Plan of Bitterne . . . . .	333

## LIST OF ILLUSTRATIONS

	PAGE
Milestones . . . . .	336
Bronze Weapons found near Hogmoor . . . . .	338
Objects found near Blackmoor House . . . . .	339
Urn found near Blackmoor House . . . . .	340
Urns containing the Blackmoor Hoard . . . . .	341
Coins from the Blackmoor Hoard . . . . .	342
Plan of the Roman Town of Calleva Atrebatum . . . . .	<i>facing p.</i> 350
Section of the City Ditch by the lesser West Gate . . . . .	350
Plan of the North Gate and adjoining Section of Wall . . . . .	355
Plan of the West Gate . . . . .	356
Hospitium and adjoining Baths in Insula VIII. . . . .	360
The Forum and Basilica . . . . .	361
Restoration of Base and Capital of a Column from the Gateway of the Forum	<i>Plate I., facing p.</i> 361
Restoration of one of the original Capitals from the Colonnades of the Basilica	<i>Plate II., facing p.</i> 363
Plan of an early Church and its surroundings in Insula IV. . . . .	365
Plan of two adjacent Houses in Insula VIII. . . . .	366
Plan of a House of the Corridor type in Insula III. . . . .	366
Restoration of a part of the Pillars and Porch of a large House . . . . .	<i>Plate III., facing p.</i> 366
Mosaic Floor, House No. 2, Insula I. . . . .	<i>Plate IV., facing p.</i> 368
Mosaic Floor, House No. 1, Insula XIV. . . . .	<i>Plate V., facing p.</i> 370
Fragment of Mosaic Pavement from Insula XIX. . . . .	<i>Plate VI., facing p.</i> 372
Brooches, etc., from the Isle of Wight . . . . .	<i>coloured plate, facing p.</i> 388
Anglo-Saxon Objects . . . . .	389
Front Cover of the Winton Domesday MS. . . . .	<i>full-page plate, facing p.</i> 528
End Cover of the Winton Domesday MS. . . . .	" " " 530
Facsimile of the first leaf of the Winton Domesday MS. . . . .	" " " 532

## LIST OF MAPS

Geological Map, Northern Section . . . . .	<i>between pp.</i> 16 <i>and</i> 17
Geological Map, Southern Section . . . . .	<i>between pp.</i> 24 <i>and</i> 25
Botanical Map . . . . .	<i>facing p.</i> 54
Roman Map . . . . .	<i>between pp.</i> 266 <i>and</i> 267
Domesday Map . . . . .	<i>between pp.</i> 448 <i>and</i> 449



## P R E F A C E

FROM the General Advertisement of the *Victoria History* it will appear that in scope this work differs materially from any County History hitherto issued. In plan of execution it is yet more distinct, for the services of specialists are for the first time employed in contributing on the various branches of knowledge represented. The wide field of learning embraced in an undertaking of this nature cannot be covered by one or two scholars, and it is the recognition of this fact which has led the Editor to distribute the work among a number of men who have made a special study of the subjects for which they are responsible.

In the selection of contributors the advice of the most eminent authorities has been followed in every case, and by interchanging the articles of those who have written on kindred subjects or on historical periods which overlap, it is hoped that unnecessary repetition has been avoided.

Hampshire has received, perhaps, less attention at the hands of topographers, historians and antiquaries than any other county in England. Why a district so intimately connected with the history of the country should have been neglected it is difficult to understand, for it contains within its area as many incitements to archæological research as any other in the kingdom. The importance of the county early in our history is indicated by the fact that its capital was for a long period of time the seat of national government, and gave the name of *The Book of Winchester* to the great record which is commonly known as *Domesday Book*. As Mr. Round, in his contribution on the Domesday of Hampshire, points out, 'it was at Winchester that *Domesday Book* was kept; at Winchester that it must have been compiled; and at Winchester that the lost original returns were preserved, far into the next century, in the Treasury of the Norman Kings.' It might naturally be supposed that the home of so many historical associations would invite the investigations and encourage the zeal of historians and antiquaries; but a close examination of the excursions into the local history of Hampshire proves very disappointing. There have only been two so-called histories of the county. The first, commonly known as *Warner's History of Hampshire*,<sup>1</sup>

<sup>1</sup> *Collections for the History of Hampshire and the Bishopric of Winchester: including the Isles of Wight, Jersey, Guernsey and Sarke*, by D. Y., with the original *Domesday of the County*, and an accurate English Translation, Preface and Introduction; . . . By Richard Warner, of Sway, in the County of Southampton, and of St. Mary Hall, Oxford. In his *Literary*

## PREFACE

contains little of that author's work beyond the translation of the Hampshire Domesday, and is, indeed, merely the compilation of a bookseller's hack. The other history, by Woodward and Wilks,<sup>1</sup> was never completed, nor could it have aspired to the position of a County History in any case.

To the help afforded by the members of the Advisory Council, and in particular to the generous efforts of the Duke of Argyll, the Editor is largely indebted for the realization of his project; he would also specially acknowledge the kind advice which Sir Henry Maxwell-Lyte and Sir Joseph Hooker have always been ready to place at his disposal.

Mr. G. Laurence Gomme, who originally was associated with the editorship of the work, but was unable through the pressure of his official duties to continue in that position, deserves unqualified thanks for his invaluable assistance in organizing some of the details of the undertaking.

The Editor is under great obligations to various members of the Hampshire Committee; and for their friendly services he would cordially thank the Earl of Northbrook, Lord Montagu of Beaulieu, Mr. W. Dale, the Rev. G. W. Minns, Mr. W. J. C. Moens, Mr. Percy G. Stone, and Mr. H. W. Trinder.

For permission to publish certain of the illustrations in this volume acknowledgment must be made of the courtesy of the Society of Antiquaries, The British Archæological Association, The Bristol and Gloucester Archæological Association, The Wiltshire Archæological Association, Sir John Evans, Mr. G. E. Fox, Mr. F. Haverfield, Mr. F. G. Hilton-Price, Mr. W. Spinkernell, Sir E. Maunde Thompson, and Messrs. Macmillan & Co., Ltd.

*Recollections* (London, 1830) Warner disowns all connection with this work, which is stigmatized by the writer of Warner's life in the *Dictionary of National Biography* as a 'miserable compilation.'

<sup>1</sup> *A General History of Hampshire; or, The County of Southampton, including the Isle of Wight.* By B. B. Woodward, . . . J. C. Wilks, . . . and C. Lockhart. 3 vols. London, 1861-69.

A HISTORY OF  
HAMPSHIRE  
AND THE ISLE  
OF WIGHT





# AN INTRODUCTION TO THE NATURAL HISTORY OF HAMPSHIRE

**I**N respect of certain natural conditions Hampshire is alone among the counties of England. The geological chart shows us at a glance that it is broadly divisible into two distinct areas. To the north lie the chalks of the Secondary system, to the south Tertiary deposits such as the Bagshot sands. To these we may add two smaller areas of different character, namely the north-east corner on the Surrey border—which is included in the basin of the Thames and is also Tertiary (London clay and sands)—and the extreme eastern side bordering on Sussex, where we find those formations of gault and greensand which correspondingly occur in the southern half of the Isle of Wight. For geological details we shall of course turn to Mr. Clement Reid's contribution; it is sufficient for our present purpose to remember the broad fact that these areas, differing as widely as chalk and clay, or chalk and sand, separate Hampshire into highland and lowland regions. A corresponding difference would therefore be looked for in the vegetable and to a lesser extent in the animal life of these areas. And indeed it would be hard to imagine a clearer natural contrast than that between the juniper-dotted wind-swept hills of the Hampshire highlands and the rather tepid condition of the New Forest, laden with vegetation and filled with springs, streams and bogs.

But also it is important to remember that we have not only, as in most other counties, to draw a distinction between open lands and woods, but further, one between woodlands commonly so called and forests proper. This is a very different matter.

Woods, planted in regular rows of underwood—hazel, chestnut, oak, larch or ash—studded with trees which are kept by thinning at more or less definite distances from one another, contained by fences, surrounded by fields, either of pasture fed or mown or of tilled lands rhythmically cropped—woods are in a sense gardened, and are therefore artificial. When a given district is sharply subdivided into definite cultivated spaces of wood, copse, or farm land, it is clear that the animal life it supports will bear a traceable relation to these conditions, and will vary but little from place to place. For the limits of their activities being so circumscribed and met at all points by the hand of man, it is only, so to say, the stay-at-home species which have a fair chance; and many of these are indeed only kept in their places by strict preservation. Roamers such as red deer are not represented, while the fox exists only on sufferance.

## A HISTORY OF HAMPSHIRE

Again, the existence of any form of animal in a given area, persecution excepted, must ultimately turn upon food supply and breeding facilities. Circumstances such as these determine for instance the distribution of birds. In a district largely covered by 'spindly' beech trees admitting of no undergrowth we should not expect to find the nightingale in any abundance, because this warbler delights in thick lower covert, and shows a preference for oak, hazel and other deciduous coppice. On the other hand, this beech-wood country is exactly suited to the wood-warbler, which loves to spend its time singing in the highest tops of the beech trees, and so cunningly conceals its eggs in a dome-shaped nest that it can place it on the open ground without fear of detection.

The same reasoning obviously applies to insect life. Wherever, as in the cultivated districts, the vegetation over large areas has been narrowed down to a certain uniformity, there—while a few species may be largely represented which depend for their successful existence upon given crops—the actual number of species will be small, in distinct relation to the want of variety in food plants. And the wild plants themselves must undergo a change in cultivated lands. Either an immense number of old forms are killed off and a few new ones established, or if old forms manage to hold their own it is in those places, such as old pasture lands, where original conditions remain unchanged. Thus the bee and the fly ophrys remain and flourish on the downlands, but have been supplanted on the tilled lands by corn marigold, an introduced weed—the attendant of crops. In change of conditions such as these really lie the bases upon which natural history turns. And it is only by going down to the root of things that we can find the causes, often at first quite unsuspected, which determine such and such facts. As an outside illustration of this we may take the case of the decrease in the numbers of the salmon in certain rivers of Ireland, which was long supposed to depend upon the netting at the rivers' mouths; whereas it was rather the upper waters and tributary areas which should have been looked to as supplying the cause. For however greatly netting may have operated, it is clearly to the draining of the bogs and the reduction of that surface of damp vegetation where the larval supply was bred, and to the arrest of endless tiny streamlets which brought this food to the rivers, that the failure of the salmon supply is more generally due.

There are in Hampshire some thirty-seven thousand acres of wood properly so called, but, in addition to this, something like one hundred and fifteen thousand acres of true forest land.

While the chalk lands of Hampshire have characters, such as beech woods and streamless valleys, common to similar regions in other counties, the forests are a feature which may be said to place this county by itself; for besides resting on a totally distinct geological basis from the forests of either Exmoor or Dartmoor, they have also many other points of distinction. There are five stretches of forest land in this county; to the



## THE NATURAL HISTORY OF HAMPSHIRE

north-east Woolmer and Alice Holt, together about seven thousand five hundred acres ; the forest of Bere, to the south-east, of about eleven thousand acres, and Parkhurst, in the Isle of Wight, of about three thousand acres in extent. But by far the most important, both in size and interest, is the great tract of over ninety thousand acres known as the New Forest. When we thus speak of the acreage of the smaller forests we can form an exact idea of their size by comparison with many ordinary landed estates with which we are familiar. But ninety thousand acres odd is a large amount, and perhaps we shall best convey a sense of its size by saying that a deer standing at Vinney Ridge, in the middle of the New Forest, could, if it chose to do so, travel ten miles to the north-west or south-east, and five miles to the north-east or south-west, without crossing the forest borders.

Here is found timber in every kind of form. Much of it, either from original crowding or from being bitten by deer or cattle or swept by wind, is twisted and stunted. On the other hand, there are oaks and beeches in abundance quite magnificent in size and vigour of growth. In addition to these we find long planted avenues of ornamental conifers, which, whether appropriate or not to an English forest, afford warm roosting-places for many birds, attract the crossbills by their cone seeds and make admirable screens against the cold winds. There are also large tracts of open moorland and brakes of gorse, broom and bracken, and in the hollows alder springs and tussocky yielding bogs. These bogs are not bottomless in peat like those of Ireland, but laid on a hard bed of gravel, and seldom more than two or three feet deep. The dry peaty places are covered with bilberry, but the cranberry is curiously absent from the New Forest, though it is found both in Woolmer and in the Isle of Wight.

The lower vegetation is also extremely varied ; here are groups of splendid old thorns, and there of ancient hollies, while along the streams and elsewhere lies mile on mile of tangle of briar and blackthorn, impenetrable in places to cattle or man.

Could a stronger contrast than we have here be imagined between any two pictures, a difference almost as wide as that between a patch of market gardens and a moor ? In the north of the county a hare could scarcely run from covert to covert without being seen, in the wild country of the New Forest a wild boar by choosing its ground might easily pass from one end to the other unobserved.

In the damper parts of the New Forest the common sundew (*Drosera rotundifolia*) with its white flowers is familiar to every one, and the rarer *D. longifolia* is known to those who have a general eye for differences in plants, and now Mr. Townsend tells us that the existence there of the long-leaved sundew (*D. anglica*) is established beyond doubt. So that all three species of these interesting fly-catching plants are represented in the New Forest. The common cotton-grass flourishes in the bogs, and a rarer form, *Eriophorum gracile*, is found to be abundant over a wide area as rediscovered by Mr. Bolton King.

## A HISTORY OF HAMPSHIRE

But though it be left to the careful botanist to establish the identity and existence of the rarer forms, the general variety in the flora must appeal to any but the most careless visitor to this part of Hampshire, which, as Mr. Townsend remarks, is 'probably richer in species than any other county, though Kent may rival it.'

The insect life of this county is as representative as that of the plants. The gall-flies and the beetles alone contribute a vast number of species. The New Forest itself is too well and too generally known as a royal field for the lepidopterist to need more than a passing reference on that score here. The white admiral butterfly (*Limenitis sibylla*) is abundant, and the sight of a bramble bush in full flower and literally covered with these magnificent insects is one worth going a hundred miles to see. The silver-washed fritillary (*Argynnis paphia*) is also found in myriads, and dazzlingly beautiful they are, sailing up a glade or feasting on the flowers of a thistle. There are also certain spots where the purple emperor (*Apatura iris*) may always be met with. Mr. Goss calls attention in his account to the disappearance from the New Forest of the wood white (*Leucophasia sinapis*), once so common there. He thinks this cannot be due to over collecting, as he says it has also gone from certain localities in Wales. We may add that this butterfly has also practically disappeared within our memory from certain woods in Kent where the collector has never been known. We are here set a difficult problem; but the wood white is an exceedingly fragile and unenergetic butterfly, and it seems just possible that its decrease may be not unconnected with climatic influences too subtle for us to feel. One can at all events easily understand that any insect of constitution so feeble as just to hold its own under normal conditions must tend to die out when that balance is ever so slightly disturbed.

It is often said by those who have paid casual visits to the New Forest that they have been altogether disappointed in the birds; that they expected to find them in great numbers and have seen scarcely any. But this only means that they have not known how to look for them. It does not at all follow that the birds of a forest must be numerically greater than those of the cultivated lands. The contrary will indeed be probably the case, because a vast proportion of the birds—the finches, for example, and seed-eating species generally—attach themselves to the haunts of men and find more easily there the food they want. Nor is the actual heart of a forest likely to be so full of birds as its borders and its sunny open spaces, where grass seeds and other forms of food abound. But the number of *species* represented in a forest area of the size of the New Forest is likely to be and is greater than that of the cultivated districts, for it holds not only these species but those in addition which love retirement. Thus the nesting of such a bird as Montagu's harrier (*Circus cineraceus*) and the honey buzzard (*Pernis apivorus*) would scarcely be possible in the north of the county. The ciril bunting (*Emberiza cirilus*) is another bird which, though it occurs in other parts of this county, is only perhaps really abundant in the New



## THE NATURAL HISTORY OF HAMPSHIRE

Forest. The Dartford warbler (*Sylvia undata*), another locally distributed bird, was also commonly found in the furze patches until the clearing of the old rough plants. As would have been expected, all the three woodpeckers—the green, the greater and lesser spotted woodpeckers (*Gecinns viridis*, *Dendrocopus major* and *D. minor*)—are generally distributed through the county and abound in the New Forest. The tawny owl (*Syrnium aluco*) is everywhere met with, but as an essentially wood owl is especially abundant in the New Forest. On the other hand, the barn owl (*Strix flammea*), the bird rather of buildings and open fields, necessarily finds only restricted conditions in the New Forest district; and the long-eared owl (*Asio otus*) is there but sparsely represented, though it is abundant in the Hampshire highlands. For this owl chiefly inhabits coverts (preferably fir-woods) lying in the open lands—conditions which obtain in the last-named district. There is now some ground for hope, as will be seen from Mr. Meade-Waldo's account, that the blackgame may again make headway under the present system of encouragement.

Mr. Gerald Lascelles has so fully described the deer of the Forest that it is only necessary here to call attention to the interesting fact that the New Forest deer may be fairly said to show by their characters descent from a local ancestral stock. One of these deer in the 'fallow' state, if turned in among a lot of park deer also dappled, would at once be distinguishable from these, if only by the colour of the rump, which in the deer of our parks is yellow, but in the New Forest deer is white.

It is not a little singular that no certain record seems to exist of the occurrence of the polecat in the county, and yet it seems impossible that this animal was always absent from districts so eminently suited to its habits. Neither are the records of the pine marten really satisfactory; but then, so far as is known the pine marten never had a southern or southeasterly range.

Of the fifty species of mammals included in the Hampshire list not all of course can be regarded as characteristic of the county. The harp seal (*Phoca grænlandica*), for example, can in no sense be said to be an inhabitant or even a normal visitor of the Solent or its coasts. The only interest which therefore attaches to such occurrences lies in the light they throw upon the wanderings of certain animals whose home is often far away. The harp seal is an ice seal, living in the arctic seas, and bringing forth its young upon the ice. These seals are abundant enough in the arctic seas, where hundreds may be seen lying on the ice or sporting out at sea in long strings of many individuals; I have also seen them on their migrations near the coasts of the arctic Russian mainland as they pass through Barent's Sea; for this seal also abounds in the other hemisphere. But a visit to England, still less to Hampshire, is no part of the harp seal's regular movements, and to reach this coast the individual recorded may have made a journey of considerably over a thousand miles. Perhaps it came down with the ice-pack to the northern coast of Iceland, and further south again maybe on the loose drift-ice, swimming on to the



## A HISTORY OF HAMPSHIRE

islands north of Scotland, and so continuing on until it reached our southern coast. Why it came we may not even guess. Possibly from a blow on the back of the head it had lost its sense of direction, or it may have been driven out of the herd, as old males are, and have sulked itself into isolation ; or again, it may have followed the charr too far, or have been carried away asleep on a detached ice-floe, and waking up far away from its companions, have missed its bearings and wandered on, lost—for harp seals are very sociable, travelling in companies. Be this as it may, from the Arctic to Hampshire is a far cry, and this coast possibly represents the lowest point reached by a harp seal in its wanderings.

But, putting accidental visitors on one side, there are two distinct cases which may always be said to be of equal interest, namely that of forms which are abundant or increasing—characteristic of a district to-day—and those which have disappeared or are dying out. A careful and connected examination of these two cases must result in the throwing of light upon the changed physical causes which have led to these respective conditions, and generally upon the influences which determine the distribution of forms of animal life. Just as the discovery of a coral formation in the Arctic regions tells us of an absolute change from tropical to arctic conditions, so, as we may learn from Mr. Garstang's paper, very slight differences in contiguous temperature of water may significantly determine differences in a fauna from point to point along a coast. There must always remain curious cases open to ingenious theories but perhaps thoroughly satisfying none. *Apus cancriformis* is a case in point. Here we have a phyllopod (leaf-footed) crustacean of an exceedingly primitive type (itself the very beginning of the 'shelled' condition), which still lived in Hampshire within the last forty years. It would seem particularly well fitted to meet all changes of climate ; its close ally flourishes in the arctic regions, where I have taken it from water puddles whose floor was made of ice ; its own eggs are remarkable for their resisting-power to desiccation ; it is abundant in Germany, and yet for all this as far as England is concerned it has gone as absolutely as the Trilobite.

One feature of this county is the occurrence in the moorlands of large shallow pieces of water. Of these one is the Fleet Pond near Farnborough, another Frensham Pond near Farnham (though the greater part of this lies within the border of Surrey), and a third Woolmer Pond, in the forest of that name. These ponds all resemble one another in being large, shallow, and hard at bottom, and they all support one or more pairs of nesting great crested grebes, and at times of migration many of these birds may be counted on them.

Hampshire is famous for its rivers and for the fish which they produce. The Itchen and the Test are celebrated trout streams, white trout run up from the sea into the Lymington and Beaulieu rivers, and salmon into the Itchen and the Test, and in the Avon are taken up to a considerable size.

No account of the Natural History of Hampshire would be fitting

## THE NATURAL HISTORY OF HAMPSHIRE

without some reference, however slight, to the naturalist Gilbert White, for in this county lies the village of Selborne, raised by his simple labours to the standing of a household name wherever the English tongue is spoken or read. It is indeed probable that the name of Selborne is better known to the English-speaking world than that of any village or town which owes its fame to a single reputation, except perhaps Stratford-on-Avon. Yet never was so great an effect produced by means apparently so slight. Gilbert White was not a poet, a great writer, nor indeed a genius at all as the word is commonly understood. He was but a scholarly clergyman who brought clear gifts of heart and intellect to the closest and most careful study of the subject that he loved, recording his observations in letters which will remain models of direct and simple and graceful prose as long as the writings of Shakespeare himself shall last.

‘This bird much resembles the white-throat, but has a more white, or rather silvery, breast and belly ; is restless and active, like the willow-wren, and hops from bough to bough, examining every part for food ; it also runs up the stems of the crown imperials, and putting its head into the bells of those flowers, sips the liquor which stands in the nectarium of each petal.’

Would not this set many who had never before given any thought to the matter watching for the same pretty incident any spring morning in the sun ? Here lies much of our debt to Gilbert White—in the impulse his writing has given to observation ; it is greatly because he has shown people what to look for and how to look for it among things that lie all about them in any country side that his name is so well loved. Yet the very simpleness of his method has led some to say that he was not scientific ; but they who advance this much mistake both the man and his time. We must remember that facts which are now matters of common knowledge were not so in his day. He ascertained more of the habits of the wild creatures of this country than any one man before or since, just as he was actually the first recorder and describer in England of the harvest mouse (*Mus minutus*) and the great bat (*Pipistrellus noctula*), two of the most interesting of English animals. Indeed, Gilbert White may fairly be held as among the first of our exact zoological observers. He made, so to say, the grave of old superstitions and opened the door of a new learning in this land. Fables—as that bernicle geese were hatched from barnacles growing on a tree, or that swallows hibernated under water—were commonplaces in the belief of that time. To myths such as these he brought the steady light of an enquiry that admitted nothing not proven at first hand.

And therefore—for all their simplicity—thoroughly to grasp these writings is not easy. The study of White’s facts alone presents no light task. But above and beyond all these lies White’s thought. It is no overstatement to say that to have mastered this to its very last suggestion were to have gained an education attainable in no other way, unless, indeed, direct from nature by an intellect and temperament of the same kind.



## A HISTORY OF HAMPSHIRE

The village of Selborne is but little altered since his day. The Common, the Hanger, the Long Lithe are still unchanged, though the custom, not very wisely exercised, of cutting timber for the commoners removes year by year some of the finest trees. The Plestor is the same, but the place of the old oak tree overturned 'by the amazing tempest of 1703,' is now occupied by a sycamore, old but apparently scarcely old enough to date from the 18th century, and in the meadow above the house is a spreading Scots or wych elm, probably at least as old as White's time, and serving to recall the other that he mentions at Norton farmhouse, which fell in the same storm. The churchyard yew is growing still, and from 'twenty-three feet in the girth' has now increased to twenty-five feet, eight inches, at four feet from the ground ; and beyond on the north side of the church is a lichened headstone to a grave bearing nothing but the record 'G. W., 26 June, 1793.'

## AUTHORITIES AND NOMENCLATURE

Throughout the following pages a record or a statement of an occurrence is to be understood as made on the authority of the writer, unless the contrary is stated.

The more important of the works which have been followed generally by the writers of the Natural History in this volume are here given. In cases where no recent work of a trustworthy nature exists, either the manuscripts of specialists have been adopted, or the standard work given has been taken as a basis and has been modified or brought up to date in the light of later research.

### BOTANY

#### PHANEROGAMIA.

Based chiefly upon the *London Catalogue*, 7th ed.

*Rosæ and Rubi*.—*London Catalogue*, 9th ed., 1895.

#### CRYPTOGAMIA.

*Filices*.—Based chiefly upon the *London Catalogue*, 7th ed.

*Musci*.—*The Student's Handbook of the British Mosses*, by H. N. Dixon and H. G. Jameson (Standard Office, Eastbourne).

*Hepaticæ*.—*Moss Exchange Club Catalogue of British Hepaticæ*, by Rev. C. H. Waddell, 1897.

*Fungi*.—*British Fungi*, by George Masee (Lovell Reeve & Co.).

*Lichenes*.—*The Lichen Flora of Great Britain*, by W. H. Leighton.

*Marine Algæ*.—Holmes & Batter's *Revised List of British Marine Algæ* (Clarendon Press, Oxford).

*Freshwater Algæ*.—Papers (as quoted), *Journal of Botany*, 1890.

### ZOOLOGY

#### HYDROZOA.

*A History of the British Hydroid Zoophytes*, by Thomas Hincks, B.A. (John Van Voorst, London, 1868).

#### MEDUSÆ.

*Das System der Medusen*, by Dr. Ernst Haeckel (Gustav Fischer, Jena, 1879).

#### ANTHOZOA.

*A History of the British Sea Anemones and Corals*, by P. H. Gosse, F.R.S. (John Van Voorst, London, 1860).

#### POLYZOA.

*A History of the British Marine Polyzoa*, by Rev. Thomas Hincks, B.A., F.R.S. (John Van Voorst, London, 1880).

#### ECHINODERMATA.

*British Museum Catalogue* (1892), by F. Jeffrey Bell, M.A.

#### MOLLUSCA.

The general classification is that of the article 'Mollusca' in the last volumes of the *Zoological Record*. The nomenclature of non-marine species as in *The Essex Naturalist*, vol. x. p. 108.

#### INSECTA.

The sequence of the orders is that adopted by Dr. D. Sharp, M.A., F.R.S., in the *Cambridge Natural History*, vols. v. and vi. (1895, 1899).

#### ORTHOPTERA.

*British Orthoptera*, by Malcolm Burr, F.Z.S., F.E.S. (The Economic and Educational Museum, Huddersfield, 1897).

#### NEUROPTERA.

*British Dragonflies*, by J. Lucas (Upcott Gill & Co., 1900).

'British Planipennia,' by R. McLachlan, F.R.S. (*Trans. Ent. Soc.*, 1870).

'Concise Generical Synopsis with an Annotated List of the British Ephemeridæ,' by A. E. Eaton, *Ent. Monthly Mag.*, xxv., 1888.



TRICHOPTERA.

*A Monographic Revision and Synopsis of the Trichoptera of the European Fauna*, by Robert McLachlan, F.R.S., F.L.S. (Gurney & Jackson, London, 1874-80).

HYMENOPTERA.

Catalogues by Edw. Saunders.

*A Monograph of the British Phytophagous Hymenoptera*, by P. Cameron (Pub. Ray Soc., vols. i., ii., iii., iv.).

'A Monograph of the British Braconidæ,' by the Rev. T. A. Marshall (*Trans. Ent. Soc.*, Lond., 1885-89).

COLEOPTERA.

*The Coleoptera of the British Islands*, by the Rev. Canon Fowler, M.A., F.L.S. (Lovell Reeve & Co., London, 1887-91); *A Catalogue of the British Coleoptera*, by D. Sharp, M.A., F.R.S., and W. W. Fowler, M.A. (Lovell Reeve & Co., London).

LEPIDOPTERA.

Based upon *British Butterflies and Moths*, by H. T. Stainton (Lovell Reeve & Co., London, 1867).

DIPTERA.

*A List of the British Diptera*, by G. H. Verrall, F.E.S. (Pratt & Co., London, 1888).

For *Tachinidæ* the system by E. E. Austin (*Brit. Mus. Nat. Hist.*).

HEMIPTERA-HETEROPTERA.

*The Hemiptera-Heteroptera of the British Islands*, by Edward Saunders, F.L.S. (Lovell Reeve & Co., London, 1892).

HEMIPTERA-HOMOPTERA.

*The Hemiptera-Homoptera of the British Islands*, by James Edwardes, F.E.S. (Lovell Reeve & Co., London, 1894-96).

CHILOPODA

DIPLOPODA

} Unpublished list by R. I. Pocock (*Brit. Mus. Nat. Hist.*).

ARACHNIDA.

Unpublished list by F. O. Pickard-Cambridge, M.A. (*Brit. Mus. Nat. Hist.*).

CRUSTACEA.

*A History of Crustacea*, by Rev. T. R. R. Stebbing, M.A. (*Internat. Scientific Series*, vol. lxxiv. p. 49, Kegan Paul, Trench, Trübner & Co., 1893).

PISCES.

*Brit. Mus. Catalogue*, 2nd ed. vol. i., by G. A. Boulenger, F.R.S. (Longmans & Co., London, 1895).

AMPHIBIA.

*Batrachians of Europe*, 2 vols., by G. A. Boulenger, F.R.S. (Ray Society, London, 1897-98).

REPTILIA.

'Lizards,' *Brit. Mus. Catalogue*, 2nd ed. 3 vols., by G. A. Boulenger (Taylor & Francis, 1885-87).

'Snakes,' *Brit. Mus. Catalogue*, 3 vols., by G. A. Boulenger, F.R.S. (Longmans & Co., 1893-96).

AVES.

*A List of British Birds*, by Howard Saunders, F.L.S. (Gurney & Jackson, 1899).

MAMMALIA.

List by Oldfield Thomas (*Zoologist*, March, 1898).

# GEOLOGY

THE history of each of our counties is so connected with its geology, that it is essential to obtain some knowledge of what took place before man entered the country, and to realize in what condition he found the regions in which he settled. We shall not otherwise learn why certain regions were occupied to the exclusion of others. Moreover, geological conditions, even in an agricultural county like Hampshire, have more influence on the gradual shifting of the centres of population from place to place than is often recognised. It will not be necessary for our present purpose to give an elaborate account of the strata and their fossils; for this belongs more purely to the science of geology. We must attempt, however, to trace out the successive stages by which the county was built up, and became at last a desirable land to dwell in. Its scenery, natural history, mineral wealth, agriculture, navigable waters and harbours, water supply, and even its healthiness, are largely dependent on its geological structure. Its local boundaries also are to some extent natural features—though perhaps to a less degree than is the case with most of the other counties.

If the reader will turn to the Geological Map, he will observe that the whole county has been coloured a variety of tints, which have a tendency to form belts extending eastward and westward. These colours will need a word of explanation. They represent strata or masses of sediment deposited at different periods; and these have been bent and tilted, and have had parts of their folds cut away by the action of sea and rain. This has led to the result, that instead of the whole of the surface of the county being occupied by a single set of the strata, and that the last deposited, we can walk across the bevelled or planed-off edges of formations of a great variety of dates, and reaching a thickness of about six thousand feet. The Geological Map represents, therefore, the extent of the area over which each formation can now be found at the surface, or as a geologist would express it, the area over which that formation crops out. The Map does not indicate, except sometimes very indirectly, the original limit of the formation, or its limits in the districts where it is hidden by newer strata.

We will now indicate what geological formations play a part in the building-up of the county, leaving for the moment their relation to the existing surface contours. It will not be necessary for this purpose to

## A HISTORY OF HAMPSHIRE

deal with the deep-seated older rocks, which occur far below the sea-level ; for they are entirely out of reach and unknown, in the complete absence of mines or of deep borings within the county limits. The strata seen at the surface within the county may be grouped as follows ; but their thicknesses, it should be observed, vary greatly even within this limited area :

Period.	Formation.	Character of the strata.	Approximate thickness in feet.
Recent to Neolithic	Peat . . . . .	Usually thin . . . . .	1 to 20
	Alluvium . . . . .	Usually muddy . . . . .	up to 60
	Blown Sand . . . . .	Clean sand . . . . .	up to 40
	Shingle Beaches . . . . .	Flint pebbles . . . . .	up to 20
Pleistocene and Palæolithic	Brickearth . . . . .	Sandy loam . . . . .	10
	Valley Gravel . . . . .	Angular flint-gravel . . . . .	10
	Plateau Gravel . . . . .	Ditto . . . . .	15
	Raised Beach . . . . .	Thin and very local . . . . .	
	Clay-with-flints . . . . .	Angular flints and clay, overlying chalk . . . . .	10
Newer Pliocene (?)	Older Plateau Gravel . . . . .	Angular flints . . . . .	15
Oligocene	Hamstead Beds . . . . .	Marl and sand . . . . .	260
	Bembridge Marl . . . . .	Red marl and clay . . . . .	100
	Bembridge Limestone . . . . .	Soft shelly limestone . . . . .	10
	Osborne Series . . . . .	Red-mottled clay, sand, and limestone . . . . .	100
	Headon Beds . . . . .	Alternating marls, sands, and thin limestones . . . . .	150
Eocene	Barton Sands . . . . .	White sand . . . . .	80 to 200
	Barton Clay . . . . .	Blue clay, with marine shells . . . . .	160 to 250
	Bracklesham Beds . . . . .	Shelly sands, clays, and seams of lignite . . . . .	700
	Bagshot Sands . . . . .	Sand, carbonaceous clay, and thin pipeclay . . . . .	15 to 660
	London Clay . . . . .	Blue clay with beds of sand . . . . .	230 to 320
	Reading Beds . . . . .	Red-mottled clay, coarse sands, and pebble beds . . . . .	85 to 160
Upper Cretaceous	Upper Chalk . . . . .	Soft chalk, with flints . . . . .	1,000
	Middle Chalk . . . . .	Harder chalk, with few or no flints . . . . .	160
	Lower Chalk . . . . .	Marly chalk . . . . .	200
	Upper Greensand . . . . .	Sand, with chert nodules . . . . .	100
	Gault . . . . .	Blue clay . . . . .	200
Lower Cretaceous	Lower Greensand.	Folkestone Beds . . . . .	160
		Ferruginous Sands . . . . .	500
		Atherfield Clay . . . . .	80
		Wealden . . . . .	Blue shales on red-mottled sands and clays . . . . .
			over 1,000



## GEOLOGY

The whole of these strata belong either to the newer part of the Secondary Period, or to the Tertiary Period. What comes next below the Wealden strata in Hampshire is quite uncertain, though we may expect to meet with at least another thousand feet of Secondary clays and limestones before reaching any rock yielding valuable minerals or coal. The probable great depth to the Coal Measures, if they occur at all in the county, is the reason why no mines or deep borings have yet been sunk.

Taking the strata included in the above table in order, commencing with the oldest, we will now give a short account of the leading characteristics of each. The geology, as already remarked, will be mainly looked at from the standpoint of its influence on man and on his occupations and settlements. Still, Hampshire is one of the most noted counties in Britain for fossils ; and in a book such as this, the intellectual pleasure felt when we seek to reconstruct the past by the aid of these remains, must not be overlooked, even when we deal with epochs long before man's struggle with nature was commenced.

The geological record in Hampshire commences with the Period known as the Wealden, when the whole of the area which now forms this county was occupied by an extensive estuary. Into this slowly subsiding estuary, or into lagoons connected with it, a muddy river flowed, depositing its sediment layer by layer until a thickness of a thousand feet or more of laminated clays or fine silty sands had accumulated. These strata, or rather the upper part of them, only appear at the surface in the Isle of Wight ; though as they are well represented just outside the boundary on the east, and again in the Vale of Wardour to the west, we may safely calculate on their continuity underneath the newer rocks, except possibly in the northern part of the county. In the Isle of Wight the Wealden rocks are brought into view by an upward curve of the strata in Sandown Bay, and again between Compton Bay and Atherfield. The part seen near Brook consists of about a thousand feet of sediments of brackish-water origin ; but we do not know how much more of the series there lies beneath the sea-level. The lowest beds are composed of red, purple, and blue variegated marls, such as are commonly found amid the deposits of an inland sea or brackish-water lake. They contain a few freshwater shells, bones of the gigantic reptile known as *Iguanodon*, and a good deal of driftwood, which at one spot near Brook Point, in the lowest strata which can be examined, has accumulated into a mass of lignite, commonly known as the 'Pine Raft'—the wood being principally coniferous. The other plants of the Wealden strata are mainly ferns and cycads, the ordinary flowering plants not appearing till a later period. The higher part of the Wealden Series consists mainly of dark-blue shale, often full of freshwater shells and minute bivalve crustaceans. Wealden strata only appear at the surface over about five square miles, though forming so considerable a portion of the foundations of the county. They form cold clay lands and yield in this district no products of economic value. Water is not likely to be found in them, except in small quantity and of indifferent quality.



## A HISTORY OF HAMPSHIRE

The next series of strata plays a far more conspicuous part in the building-up of the county. The Wealden estuary continued to subside, so that the sea flowed in, and the freshwater deposits were succeeded by about six hundred feet of purely marine strata with sea shells.<sup>1</sup> This series is commonly known as the 'Lower Greensand,' on account of the dark-green tint of the greater part of the sands which compose it. We must point out, however, that though this tint is very noticeable in the unweathered strata, such as are met with in deep wells, there is a great tendency for the green colouring matter, which is an iron compound, to turn rusty, thus giving the sands a warm reddish colour. This iron often causes the water from the sands to become somewhat ferruginous, or in places even strongly chalybeate; but the whiter sands yield excellent supplies of good soft water.

Though the series of strata of which we are now speaking is known as the Lower Greensand, the lowest bed consists of about eighty feet of clay, full of the marine shells so enthusiastically collected and illustrated by Gideon Mantell.<sup>2</sup> This 'Atherfield Clay' is best seen in the neighbourhood of Atherfield, in the Isle of Wight, where besides the marine shells it contains in certain seams abundant remains of lobsters. It also appears in the cliffs at Compton Bay, and again in Sandown Bay; but inland only occupies a narrow belt of country, and is greatly masked by soil washed from the hills above.

The next division of the Lower Greensand in the Isle of Wight consists of five hundred feet or more of ferruginous sands. The strata form bold cliffs, which are cut into by a series of Chines, the best known of which is Blackgang Chine. The upper part of Blackgang Chine is excavated through the overlying 'Sand-rock Series.' These two divisions, with the still higher 'Folkestone Beds,' form a wide area of picturesque and hilly country, dry, sandy, and healthy, in the southern half of the Isle of Wight, and again between Petersfield and Hind Head. It is somewhat poor agriculturally, and a good deal of it is still open heath or moor. The area over which the Lower Greensand appears at the surface was probably in prehistoric times but thinly populated; for though the country was open and free from wood, little of it was good pasture, and it would be of small value for cultivation in days when land of much better quality was still unoccupied.

At the close of the Lower Cretaceous Period there seems to have been a certain amount of movement and tilting of the earth's crust, though not to so great an extent as occurred in Dorset. As a result of this movement, the Lower Cretaceous rocks in the western part of the

<sup>1</sup> The fullest accounts of these will be found in the numerous papers published by Dr. Fitton between the years 1824-47 (*see Bibliography*). Later results and details relating to the area near Petersfield will be found in Topley's 'Geology of the Weald,' *Memoirs Geological Survey* (1875). The results of the newest survey of the Isle of Wight area are given by Mr. Strahan in the 'Geology of the Isle of Wight,' 2nd edit., chaps. iii., iv., v., *ibid.* (1889).

<sup>2</sup> *Geological Excursions round the Isle of Wight* (1847).

## GEOLOGY

county were raised above the sea-level, and cut away, or 'denuded' as geologists term the process. This led to the deposition, in certain parts of the county, of the next series of sediments on the bevelled edges of the older strata, while in other parts there was no perceptible unconformity in the stratification.

Next to the Lower Greensand on the Geological Map will be seen everywhere a sinuous irregular belt or ribbon of colour, which represents the Gault, a mass of slippery clay of marine origin, which within the county ranges from one hundred and twenty to two hundred feet in thickness. It always forms low wet land, with a heavy clay soil, formerly occupied by oak forests. Land of this character could not readily be cultivated by primitive ploughs or mattocks; and as oak timber is difficult to work, and does not burn readily, the clay lands probably remained unoccupied till the country was fairly thickly populated. Such land in its natural state would always be useful for woodland pasture, and especially for swine. Traces of important prehistoric camps or settlements are rarely to be found on clay soils.

The presence of the slippery Gault clay in the cliffs somewhat above the sea-level, has caused the formation of the extensive landslips which form the picturesque Undercliff between Blackgang and Bonchurch in the Isle of Wight. Not only has the Gault itself a tendency to slip, but it also, by holding up the water, turns the base of the stratum above into a moving quicksand. These circumstances, added to the seaward inclination of the strata in the hills above, have all helped to bring about the slipping of the rocks in masses of enormous magnitude. Even inland, the Gault tends to slip; so that landmarks move slowly downhill, hedges, once straight, now follow wavy lines, and the surface of the fields is often curiously ribbed or undulating.

The next succeeding stratum also forms a belt across the country, parallel to the Gault and lying between that clay and the foot of the Chalk Downs. It is a mass of fine sand and chert nodules, known as the 'Upper Greensand,' to distinguish it from the Lower Greensand, which lies below the Gault. In ordinary character it has a considerable resemblance to the older deposit; but in Hampshire it is less ferruginous and much more calcareous. It forms usually an excellent light soil, especially where partly covered by a soil washed from the Chalk hills above. The water from the Upper Greensand is usually of excellent quality.

In the Isle of Wight the Upper Greensand forms a bold feature in the vertical cliff which dominates the Undercliff, and again on the landward side of the neighbouring hills. It also forms a conspicuous but narrow ridge stretching along the central Downs from Culver to Freshwater Bay. The reason of the conspicuousness of this stratum, which is only from eighty to one hundred and twenty feet thick, is found in the hardness of the beds of chert and freestone which it contains, especially near Ventnor. When we cross into the Wealden area around Petersfield and northward to Selborne and Bently, we again meet with the Upper



## A HISTORY OF HAMPSHIRE

Greensand ; but it is here of a softer character and consequently does not form so marked a topographical feature. As the Greensand reappears near Kingsclere, and is also well exhibited in Wiltshire, there is little doubt as to its continuity beneath the Chalk in all parts of the county.

Chalk, as will be seen by the Geological Map, forms the surface rock over more than a third of the county ; and its presence has had an influence on the position of settlements, and on the early history, far greater than we can realize in the present altered state of the country. There is found altogether a total thickness of from one thousand to fourteen hundred feet of this soft white limestone, mainly formed from the remains of marine organisms ; and though the lowest two hundred feet is marly and impervious, the rest is strangely uniform in character. The two hundred feet of Lower Chalk usually forms gently undulating land, lying at the foot of the steep escarpments overlooking the Greensand ; or appears in the bottoms of the deeper valleys. It is now excellent land, either arable or pasture ; but when the country was first settled it was in all probability mainly covered by forests of oak and beech. On it are found numerous small running streams ; but the springs are usually thrown out at the base of the more pervious Chalk which occurs higher up.

The rest of the Chalk forms dry undulating Downs, with singularly smooth flowing curves, unlike the surface features formed by any other rock. Though streams appear in many of the deeper valleys, especially after a rainy autumn and winter, the general characteristic of the scenery of the Chalk districts is the presence of numerous intricate winding valleys or 'coombes,' which never, even in the wettest season, contain any water. The origin of these dry coombes will be spoken of later on. Another noticeable characteristic of the Chalk scenery, is the openness of the country and the scarcity of trees. This is no artificial change caused by man ; it is mainly an original characteristic of the Downs, which has existed from times before man first appeared in the country, and would remain after he left it. When the first Neolithic settlers came, they must have discovered an enormous area of open pasture, with a light soil easy to till with their rude implements. They, however, could not form permanent settlements away from the streams, until they learnt the art of digging wells. The ancient villages and settlements, therefore, are mainly to be found in the moister valleys, and till comparatively modern times the higher Downs were probably almost unpeopled though always valued as pasture.

While we are speaking of these upland pastures, it may be worth while to draw the reader's attention to a curious relic of the ancient settlers, which, however, is only remotely connected with the geology. At the foot of the Chalk hills, generally near to the junction of the dry Upper and Middle Chalk, which form open Downs, with the marly Lower Chalk, which was covered with forest, is often found a thick bushy hedge, which can be traced for long distances, and also occurs under similar circumstances in other counties. This hedge will at once strike







SCALE 4 MILES TO AN INCH





County Boundary shown thus ———





## GEOLOGY

the attention as something exceptional ; for unless replanted in modern times it contains little hawthorn, and is very wide. It consists of a belt of small trees, among which maple, cornel, sloe, hazel, buckthorn, way-faring-tree, elder, holly and spindle-tree predominate, and are mixed with beech, ash, stunted oak, yew, crab-apple and service-tree. In short, it appears to be a relic of the vegetation of the original margin of the native forest, rendered denser and trimmed to a certain extent, but in other respects not greatly altered. If the sketch of the character of the country on each side in prehistoric times has been read, the explanation of this feature becomes obvious. At the present day the hedge separates the open Chalk pastures from the arable land, and as that has always been a convenient boundary, it has commonly been left undisturbed, or has been replaced by a narrower hedge of hawthorn. In old days the presence of a barrier at that point was of even more importance. It now prevents the sheep from straying into the cultivated fields ; it then prevented the flocks and herds from straying into forests infested with wolves, or occupied by thieves and outlaws. It would be an obvious precaution to encourage a bushy growth along the margin of the forest, and to block all but a few of the gaps. And this would probably be done without any intentional planting of a hedge, but merely by filling gaps, pulling brambles and briars across, and bending boughs which would afterwards take root. Even in our climate an impenetrable jungle soon grows, if the forest is protected ; it is merely the trampling of large animals that keeps the tracks open. On a soil of this character an open thicket or cover that has been fenced in for a series of years becomes quite impassable in a short time, everything becoming bound together by a tangle of thorns, clematis and honeysuckle. No one intentionally planting a hedge would think of selecting the shrubs found in the one at the foot of the Downs ; they are, however, just the ordinary undergrowth found on the outskirts of the few patches of native forest still to be met with on similar soils.

The indirect applications of geology have perhaps led us somewhat far away from the principal subject that was being spoken of—the building-up of the foundations of Hampshire—and we must now return to the Chalk Downs. These, as already suggested, must have formed, in prehistoric times and down to comparatively modern periods, by far the most valuable lands in the country, so that the population was divided between them and the coast strip. The Downs yielded to the early settlers pasture and corn land, and also flints for their weapons. No doubt the earliest flint-weapons found in Hampshire were made from any flints ; but the more civilized Neolithic races commonly used unweathered flints, purposely mined for in the Chalk. These can be flaked more readily, and give better cutting edges than the loose flints found on the fields or taken out of the surface gravel. Mines reaching to some particularly good bed of flint—all beds are not equally good—were probably valuable possessions in early days, and were regarded in the same way as were the ironstones worked in the Iron Age, or as are the

## A HISTORY OF HAMPSHIRE

coal-seams at the present day. One defect of the Downs—the scarcity of fuel and timber—could be remedied without much difficulty by expeditions into the woods.

To the period when Chalk was being deposited in the sea that covered Hampshire succeeds a long interval, for which the records have been entirely destroyed in this county, and indeed almost throughout Britain. The study of contemporaneous records in adjoining counties suggests, however, that Hampshire still remained below the sea. The next strata that we can examine in Hampshire are of Eocene age, and show a complete change of conditions, the deposits of an open sea far from land being followed by others of a totally different character. These are the ‘Reading Beds,’ so called from the town of Reading, round which they are well seen. They are not by any means the earliest representatives of the Tertiary formations; but merely the earliest that we can find in Hampshire. They lie on a more or less planed and eroded surface of the Chalk; but as the Chalk does not seem to have been much tilted or folded in the interval, the unconformity between the two deposits is not so striking as it would have been if Eocene strata could be seen to lie on the upturned edges of Cretaceous rocks. As it is, we are only able to recognise the great extent of the gap by comparison with other regions where the record is more complete, and by a study of the fossils, all of which had time to change in the interval.

The Tertiary strata found within the county occur in the main in a flattish basin-shaped hollow, elongated in an east and west direction, and bounded on the north by the Chalk Downs near Winchester and on the south by the central ridge of the Isle of Wight. This area is known to geologists as the ‘Hampshire Basin,’ though parts of it extend into Dorset and Sussex. The Tertiary strata near Aldershot belong, however, to another depressed area, known as the ‘London Basin.’ The Reading Beds consist of an extremely variable series of red-mottled plastic clays, coarse sands, beds of flint-shingle, and occasional seams of laminated clay in which are found well-preserved leaves. Animal remains are only rarely to be found in Hampshire; they include bones of turtles, crocodiles, and land mammals, and a few brackish-water or river shells. The flora is quite different from that of the Wealden strata, consisting largely of flowering trees and shrubs closely allied to plants still living in warm-temperate parts of the world. The deposits, which are about a hundred feet thick, evidently have been laid down under conditions very similar to those which held during the Wealden period; they also point to a river-estuary and lagoons, in which the turtles lived, and into which the remains of land animals and plants were washed. This estuary seems to have opened to the east, for in that direction, in Sussex and Kent, the deposits become more marine and shelly, while to the west, in Dorset, they tend to pass into coarse angular river-gravels. The Reading Beds form but indifferent land, usually either a cold wet clay, or else a sand so coarse as to cause the crops to dry up and ‘burn’; in each case there is usually a great



## GEOLOGY

deficiency of lime and of other important constituents in the soil. The plastic clays are valuable for tiles and pipes, and sometimes for coarse pottery ; the sands yield water of fair quality. The distribution of the Reading Beds will best be understood by a glance at the Geological Map. They everywhere form a narrow continuous belt bordering the Chalk, where that rock plunges beneath the Tertiary strata. Throughout the county, though the strata were evidently deposited in a horizontal position, they commonly dip at an angle of several degrees. In the Isle of Wight, they make very little show at the surface, for the disturbance has been so great as commonly to cause these strata to become vertical ; so that the surface exposure or 'outcrop' is no wider than the thickness of the deposit—about a hundred feet. This tilting and its effects will again be alluded to.

The next succeeding deposit again gives evidence of the submergence of Hampshire beneath the sea ; for the London Clay was of marine origin, and contains in places abundant remains of tropical shells, sharks, and turtles, mingled with drifted wood of palms. It consists of a mass of dark-blue or brownish clay, usually more sandy than that found in the neighbourhood of London, varying in thickness from fifty feet at the northern border of the county to two hundred, or even three hundred feet in the Isle of Wight. The area over which the London Clay is exposed at the surface was mainly covered by oak forests till comparatively recent times ; even now about a quarter of it is still woodland and cover.

The remainder of the Eocene strata, on account of their variable character, and of the difficulty of identifying the deposits where fossils are absent, have been grouped together on the Map. They may be described as forming essentially wide areas of open forest, or of barren heath, often waterlogged, over which few trees grow except the birches, willows, and alders that mark the courses of the streams, and the seedling pines which are spreading so rapidly. This area is largely of low elevation, and is so covered with gravel or gravelly soil that its character is greatly modified, though not for the better from the point of view of the farmer. As the divisions can only be satisfactorily traced in the southern part of the Hampshire Basin, it will be simplest to describe the peculiarities of each within that area, and then to indicate roughly what changes it undergoes when followed into other parts of the county.

The London Clay seems to pass gradually upwards into the Bagshot Sands, which, however, are only occasionally fossiliferous. As seen in Alum Bay, in the Isle of Wight, they have a thickness of over six hundred feet, made up of successive strata of various-coloured sand with imperistent seams of pipeclay. One of these seams, about two hundred feet above the base of the deposit, is full of leaves, belonging to figs, laurels, aralias and other sub-tropical trees, and also of leguminous pods and fragments of fan-palm. These plants have enabled Mr. Starkie Gardner to show that the deposit is of the same date as the thicker and

## A HISTORY OF HAMPSHIRE

more valuable pipeclay of Poole, in Dorset.<sup>1</sup> The sands, though forming so thick a mass in Alum Bay and at Poole, thin out rapidly in a northerly and easterly direction. At Southampton they are thin, and at Portsmouth and Hayling they have become unrecognisable. It is not perfectly clear, however, whether they have actually thinned out, or have changed laterally into marine loams, which have there been classed with the next succeeding deposit. The Bagshot Sands of the Hampshire Basin are formed in the main of fluviatile deposits, which, however, contain occasional seams of marine shells and pieces of teredo-bored driftwood. Like the Reading Beds already described, they tend to become more fluviatile westward and more marine eastward; and from certain indications it appears probable that the ancient river flowed from the granite hills of Devon or Cornwall.

The Bracklesham Beds consist largely of sandy clays and laminated sands, best seen in Whitecliff Bay, where they are full of marine shells, and contain occasional seams of lignite. At that point also they reach their greatest development, having, according to the measurements made by the Rev. O. Fisher, a total thickness of six hundred and fifty feet.<sup>2</sup> They also occupy extensive areas around Christchurch, Ringwood, Southampton, and Titchfield; in fact, half the area coloured on the map as 'Bagshot Beds' belongs to this division. The Bracklesham Beds, though containing a great deal of brickearth, are much more sandy than the unweathered shelly beds seen in Whitecliff Bay and at Bracklesham would lead us to expect. The cementing matter is mainly lime and iron, not clay, and when this is dissolved by percolating rain-water, the residue forms an open porous soil. The soil, however, is a good deal better than that of the Bagshot Sands; but a large part of the area is completely changed by the occurrence over it of five or ten feet of flint-gravel. The only economic products obtained from the Bracklesham Beds are brickearth, extensively dug around Southampton, and sand for building. Water can generally be found in the sands, though it is often somewhat ferruginous.

The Barton Clay, which succeeds the Bracklesham Beds, is a more purely marine deposit, excellently seen in Barton Cliffs, in Christchurch Bay. It is famed for the variety and perfect preservation of its fossils, which include showy volutes and various other tropical shells. In Alum Bay it has a thickness of two hundred and fifty feet, decreasing to two hundred at Barton and to still less in the northern part of the New Forest. In the London Basin the lower part of it is believed to be represented by the so-called 'Upper Bagshot Sands,' which, however, have only yielded few and badly preserved fossils. The best account of this division is that given by Messrs. Gardner, Keeping and

<sup>1</sup> 'On the Flora of Alum Bay,' in 'Geology of the Isle of Wight,' 2nd edit., pp. 104-108, *Memoirs Geological Survey* (1889).

<sup>2</sup> 'On the Bracklesham Beds of the Isle of Wight Basin,' *Quart. Journ. Geol. Soc.*, vol. xviii. pp. 65-94 (1862); see also Gardner, 'Description and Correlation of the Bournemouth Beds—Part I., Marine Series,' *ibid.*, vol. xxxv. p. 214 (1879).



## GEOLOGY

Monckton.<sup>1</sup> It forms wet clay land principally covered by oak-trees ; but the greater part of the area is overlaid by gravel, which tends to become waterlogged. The Barton Sands, also of marine origin, occupy a considerable area in the New Forest, where, however, they are often very wet. They are important as having yielded the pure white dust-like glass-sands which were once extensively dug in Alum Bay. In the New Forest, however, they are usually ferruginous, and there are constant complaints of the taste of the water obtained from wells in them. They do not extend beyond the New Forest Division.

The Oligocene strata need not here be treated of in detail, for they form a continuous sequence of fairly uniform character, and have been fully treated of in readily accessible geological memoirs.<sup>2</sup> They occupy a single compact area in the northern half of the Isle of Wight and in the southern part of the New Forest ; beyond these limits they are unknown in Britain, unless they are represented by the lava-flows and interbedded plant-bearing volcanic ashes found in the north of Ireland and in the south-west of Scotland. Within the Hampshire Basin the Oligocene strata consist mainly of various-coloured clays, muds, and sands, deposited in shallow lakes or in an estuary, to the depth of about six hundred feet. Alternating with these soft slippery strata, occur a few thin bands of limestone, the best known of which, the Bembridge Limestone, was formerly extensively dug for building, especially around Binstead. These limestones are unlike any others that we have in Britain, being soft and cavernous, and mainly built up of the remains of freshwater shells, mixed with the curious lime-secreting aquatic plant known as the *Chara*. Bones of land mammals also occur ; though not plentifully. A few subordinate marine beds occur in the Oligocene series ; but all of them yield evidence of the proximity of land, in the drifted land and freshwater shells that are intermingled with the marine species. The only exception to this fluvio-marine character is found in the highest bed of all ; for the uppermost part of the Hamstead Series is thoroughly marine, and seems to point to another submergence of Hampshire, for which we have no further direct evidence. The Oligocene Period was characterized in Britain by a fauna and flora indicating a climate somewhat less tropical than that of the preceding Eocene Period. Crocodiles and turtles were still abundant, but the mollusca, though often allied to forms now living in warmer seas than ours, are less exclusively those of the Tropics. The flora is imperfectly known as yet ; though it seems to have been a poor one. Twigs and cones of a dwarf conifer allied to the living *Athrotaxis* of Australia, and seeds

<sup>1</sup> 'The Upper Eocene, comprising the Barton and Upper Bagshot Formations,' *Quart. Journ. Geol. Soc.*, vol. xlv. pp. 578-633 (1888).

<sup>2</sup> Edward Forbes, 'On the Tertiary Fluvio-marine Formation of the Isle of Wight,' *Mem. Geol. Survey* (1856) ; Keeping and Tawhey, 'On the Beds at Headon Hill and Colwell Bay in the Isle of Wight,' *Quart. Journ. Geol. Soc.*, vol. xxxvii. pp. 85-127 (1881) ; Bristow and Reid, 'The Geology of the Isle of Wight,' 2nd edit., chaps. x., xi., xii., *Mem. Geol. Survey* (1889).



## A HISTORY OF HAMPSHIRE

and fruits belonging to water-lilies (*Nelumbium*, etc.), and other aquatic plants are commonly met with.

This closes the description of the laying down of the foundations of Hampshire. We have next to show how the old sea-bed was raised, and its level strata became bent and tilted. Moreover, we must indicate in what way this elevated region was planed down and channelled till it became the undulating country with varied surface geology and soils that we now see. Many agencies have played their part. For long periods, as we have shown, in a subsiding area the strata were piled up bed upon bed to the depth of several thousand feet. Then the movement was transformed into one of elevation, and for considerable periods the loss by the action of sea and rivers has far exceeded the amount of sediment deposited within this area.

We left off the description of the strata found in Hampshire with the Middle Oligocene Period ; for though some hundreds of feet more of sediments may have been deposited, these were subsequently so completely destroyed that there is now a great break in the records. We can only say that during a period between the Middle Oligocene and the Older Pliocene lateral pressure threw the whole of the Secondary and Tertiary strata of this part of England into a series of folds and waves, so great that, had these waves remained intact, Hampshire and the south-east of England in general would now be traversed by a series of gigantic ridges and furrows with an east and west axis. The highest of these ridges would have been at least six thousand feet above the sea. It must not be imagined, however, that this state of affairs ever actually existed ; for various slight indications suggest that the folding was a slow, long-continued, and perhaps intermittent process, extending over many thousands of years. It had probably begun as early as Eocene and Oligocene times ; it became most active in the Miocene Period, and probably died away gradually in the Pliocene.<sup>1</sup> While this upheaval was going on, the rain was rapidly cutting away the soft deposits as they rose, running down each side of the central ridge of the Weald in numerous streams, and then flowing away to the sea along the furrows of the London and Hampshire Basins, approximately by the channels now occupied by the Thames and Solent, and by the upward continuation of the latter now occupied by the River Frome.<sup>2</sup>

A few words of description must be devoted to the folds which play so conspicuous a part in the geology of the county. Though these form two main ridges, that of the Weald and that of the centre of the Isle of Wight, and two main furrows, now the London and Hampshire Basins, there are several subordinate undulations. These are not ridges and furrows running continuously across the county, but form elongated domes or troughs arranged *en échelon*, so that where one dies out another

<sup>1</sup> Reid and Strahan, 'Geology of the Isle of Wight,' chap. xiv., *Mem. Geol. Survey* (1889) ; Reid, 'Pliocene Deposits of Britain,' pp. 69, 70, *ibid.* (1890).

<sup>2</sup> Topley, 'Geology of the Weald,' chap. xvi., *Mem. Geol. Survey* (1875) ; Reid and Strahan, 'Geology of the Isle of Wight,' 2nd edit., chaps. xiv., xv., *ibid.* (1889).

## GEOLOGY

appears, parallel to it but not in quite the same line. In short, they behave like wrinkles in a crumpled cloth or in a drying sheet of varnish.

Commencing at the north-eastern border of the county, we find ourselves on the southern edge of the depression filled with Tertiary deposits which extends eastward through London to the North Sea. The part of the London Basin which lies within the county of Hampshire stretches from Aldershot and Farnborough on the east to Kingsclere and East Woodhay on the west. It is principally remarkable for the steep northward inclination of the Chalk, which plunges sharply beneath the Tertiary strata, and then becomes horizontal again within a short distance. The London Basin, therefore, is not nearly so deep a depression as any one would imagine from seeing the high angle at which the strata are tilted at its margin.

Travelling southward, we next meet with an upward fold. This is the Kingsclere 'anticline,' bringing to the surface the Upper Greensand between Kingsclere and Highclere, but dying out or becoming lost in the Chalk within a short distance to the east and to the west. The fold is noticeable as continuing the central axis of the Weald, which is continued along this line and not through the centre of the Downs. It still nearly coincides with the watershed, and must at one time have been the highest land.

Next follows the central ridge of the Weald, the wide anticlinal arch about which so much has been written. This arch in Hampshire is not nearly so striking a feature as it is further east; in fact, on the Downs north of Winchester it has become so flattened that scattered outliers of the Eocene strata are preserved on the crest of the arch. These serve to connect the London with the Hampshire Basin, showing that the two were once continuous and have only been disconnected by the upheaval of this ridge and the cutting away of the most elevated parts of it. The Wealden area, properly so called, barely touches the eastern border of the county.

Crossing the wide expanse of the Chalk plateau, we find a narrow but fairly sharp synclinal fold between Mottisfont and our western border. This calls for no remark, except that westward it dies out rapidly near Salisbury, and that it constitutes one of the subordinate undulations which go to make up the large syncline of the Hampshire Basin, into which we have now entered. The Hampshire Basin, though smaller than that of London, is in many respects more interesting. Its folding is much sharper and deeper, and consequently brings to view a much greater variety of geological formations. Moreover, its subordinate waves are more clearly orientated with their axes east and west, and suggest the close proximity towards the south of some barrier of hard rock, against which, in Miocene times, these softer strata were being thrust and crumpled. The best known of these subordinate waves is the one that comes next in order. The conspicuous and strongly-fortified Chalk ridge of Portsdown is part of a long and sharp anticline, traceable for nearly thirty miles from east to west, but surrounded on every side by



## A HISTORY OF HAMPSHIRE

Tertiary strata, and clearly included in the Hampshire Basin. This anticline commences close to Chichester, and enters our district south of Emsworth ; but for reasons which will be explained later on, it does not form a visible surface feature till Havant is passed. Then, at Bedhampton, it rises into a long narrow chalk down, which is continued in a west-north-westerly direction as far as the Titchfield River, where the Chalk sinks out of sight again. This, however, is not the termination of the anticline, which can be traced as a fold in the Tertiary strata several miles further west, bringing London Clay close to the surface on Southampton Common.

The principal synclinal fold of the Hampshire Basin also extends in a west-north-westerly direction. Commencing under the English Channel, the deepest part of the depression strikes the coast of the Isle of Wight at Bembridge, crosses the Medina a mile or so north of Newport, passes under Parkhurst Forest, and disappears beneath the Solent at Bouldnor and Hamstead. On the mainland it reappears south of Lymington, can be followed near Hordle, and across the Forest south of Holmesley, merging before it reaches the Avon into the general Tertiary Basin, in which subordinate undulations are no longer traceable.

This brings us to the southern margin of the Hampshire Basin, which is remarkable for its sharp definition, the high dip of the strata, and their rapid recovery of a nearly horizontal position within a short distance. This margin is well seen in Whitecliff Bay and in Alum Bay, at both of which places the strata are vertical, and are a good deal crushed out of shape. It is a curious point that in all of these folds the northward dip or slope is at a higher angle than the southward. The strata rise gradually towards the north, then make a sharp downward bend, and rise again.

The folds that remain to be described are two anticlines that occupy the southern part of the Isle of Wight. These have already been alluded to as bringing the Wealden strata above the sea-level. All that need be added is that the fold seen in Sandown Bay can be traced westward south of Newport, till it dies out amid the Tertiary strata near Calbourne. The Brixton anticline is first observed near St. Catherine's Down, becomes more important westward as the more northerly fold dies out, passes under the sea at Freshwater Bay, and is again met with on the coast of Dorset.<sup>1</sup>

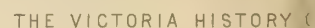
At the extreme south of the Isle of Wight the strata again spread out horizontally in St. Catherine's Down, or even tend to roll over. Thus their seaward inclination, as Mr. Strahan has shown,<sup>2</sup> helps to bring about the extensive landslips of the Undercliff. Nearly all big landslips are aided in this way by the inclination of the strata. A mountain or high cliff with the beds dipping inward will usually present

<sup>1</sup> Fuller descriptions of these folds will be found in the *Memoirs of the Geological Survey* relating to the different parts of the county.

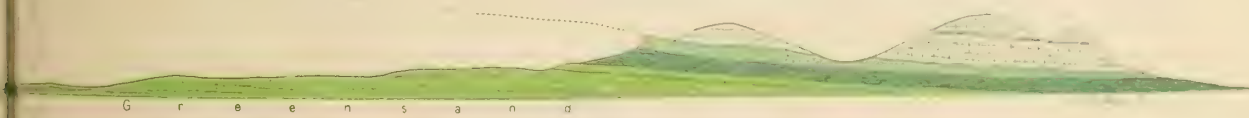
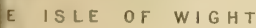
<sup>2</sup> *Op. cit.*, pp. 60-62.















## GEOLOGY

a precipitous face, from which there is a constant fall of blocks or small avalanches. If the dip is outward, the dislodgment, on the other hand, more commonly occurs in large masses, which after wet weather move bodily downward, launched like large ships over a sloping lubricated bed. The slipped masses then tend to form buttresses, which for long periods may protect the cliff from any further movement.

The lateral compression and packing of the strata to which Hampshire was subjected in middle Tertiary times must necessarily have caused the rocks to expand upward, in the only direction in which they were free. They rose in irregular ridges and formed dry land, which seems never since to have been completely submerged, though of this we cannot speak with absolute confidence, as the geological record for these later Tertiary periods is most imperfect. The first result of this emergence of Hampshire from beneath the sea was to expose the strata to the wasting action of rain and rivers; and the streams that formed must necessarily flow down the slopes of the inclined strata toward the main troughs, in which they collected into two important rivers, the Thames and the Solent. No doubt the country has since seen many changes; but the initial direction and course of the rivers has never been lost. A stream always tends to deepen and to widen its valley; so that a course first started by some slight inequality quite invisible to the eye, may be retained ages after every trace of the original surface over which it flowed has been destroyed. The east and west flowing rivers occupied the main troughs, which can still be clearly recognised; those flowing north and south, though following the original slope of the ground, seem to have had their exact courses fixed by very small inequalities of the surface, which can no longer be traced.

It is necessary to emphasize these points, for unless they are thoroughly understood, the courses of the smaller rivers of Hampshire will appear to be as entirely wanting in system as was thought by the geologists of a former generation, to whom a river-valley was nothing but a gaping fissure, somewhat widened by the flow of the water. Such valleys do undoubtedly occur at rare intervals in other districts; but no valley in Hampshire, as far as the new Geological Survey shows, coincides with a fissure or 'fault.' The few faults that are to be found within the county are not fissures approximately vertical, along the line of which the strata on one side have sunk.<sup>1</sup> They are faults of the curious type known as 'overthrust,' in which lateral pressure and folding have proceeded so far, that the rocks have given way, and certain strata have been pushed along more or less horizontally over the rest. A full account of the formation of these curious overthrusts would take too much of our space, and would necessitate constant references to other regions; we must therefore refer the reader to the principal

<sup>1</sup> The 'Medina fault,' of the Isle of Wight, which was so often quoted and figured in the old text-books as cutting the Isle of Wight in two and originating the Valley of the Medina, has now been proved not to exist. See 'Geology of the Isle of Wight,' 2nd edit., p. 201, *Memoirs of the Geological Survey* (1889).

## A HISTORY OF HAMPSHIRE

sources of information, merely observing that in Hampshire and the south of England generally we have, clearly laid open to our view, the initial stages of the building up of a mountain chain.<sup>1</sup> True mountain chains always show signs of this sharp folding and overthrusting, which forms belts of disturbed ground at right angles to the pressure, and tends to affect the country again and again along the same lines of weakness. If it were not for the softness of the rocks that have been elevated, which has enabled the rivers to cut them away almost as fast as they rose, we should now find hills five or six thousand feet high in Hampshire.

We will now attempt to sketch out the course of events subsequent to the uprise of Hampshire, and will trace as far as possible the successive stages by which the existing surface features originated. For this purpose it will be necessary to appeal to contemporaneous chronicles, in order to supply the deficiency of the county records. This class of evidence is often so indirect, and appeals so exclusively to the expert geologist, that it would often be difficult to make its bearing understood without elaborate descriptions of adjoining regions. Such descriptions, however, are outside the scope of the present work; and we can only state that the conclusions, which are all that can here be given, are not merely speculative, the course of events having been traced almost continuously in other districts. Much of the evidence will be found in companion volumes of this series of county histories.

Scarcely anything is known as to the state of Britain in the Miocene Period, though the entire absence of any deposits of that date suggests that most of the country was then dry land, and therefore suffering loss instead of receiving accessions to its bulk. Still, it is quite possible that the submergence may have continued to a later period; for though in the middle of France and Germany the Miocene deposits are of lacustrine origin, in Belgium and in the west of France they are mainly marine. The climate of Europe was a warm one, though the temperature was already distinctly lower than in the Eocene Period. The animals and plants now began to take on a more familiar appearance, though few of the species are actually the same as those now living.

The history of the succeeding Older Pliocene Period is also somewhat obscure, for marine deposits of that age occur in Suffolk, and rise to six hundred feet above the sea in Kent; so that a submergence to the same extent may have affected Hampshire. On the other hand, certain slight indications suggest that, though no large area in Hamp-

<sup>1</sup> The most important of these overthrust faults in Hampshire was figured by Webster as far back as 1811, in Englefield's *Isle of Wight*, pl. 26 and 27; it has recently been fully described by Mr. Strahan in 'Geology of the Isle of Wight,' p. 241. Another similar overthrust fault on a smaller scale, found at Ashe, was described in the same place by Clement Reid; they are both shown in 'Horizontal Sections,' sheet 47, 2nd edit. (*Geological Survey*). The general question of the origin of folds and overthrusts is treated of in Lapworth's *Intermediate Text-Book of Geology*, chap. iv. (1899); and in Geikie's *Text-Book of Geology*, 3rd edit., book vii. (1893).



## GEOLOGY

shire is now above the six hundred foot level, in Older Pliocene times denudation had not proceeded so far, and Hampshire was then a good deal higher than Kent. Moreover, the Older Pliocene marine deposits of Cornwall and of the north-west of France point to a less submergence than occurred in Kent. Until we discover clearer evidence, the question of the true date of the final elevation of Hampshire above the reach of the sea must, however, remain undecided.

By Newer Pliocene times the upward curves of the folds in Hampshire had been planed away, partly by the sea, partly by rain and rivers. The general contours of the country had already approached closely to those we now see, and the larger rivers, at any rate, occupied their present valleys. One very important change, however, dates in all probability from some part of that Period. It will be noticed that up till now we have only dealt with the Isle of Wight as part of the mainland of Hampshire. It was not yet detached, and formed nothing but the upland country lying on the right bank of the old Solent river, not far from its mouth. The former continuity of the rapidly wasting chalk-ridge of the Needles with the similar point on the Dorset coast near Studland, is so obvious to any one standing on the cliffs, that it is not surprising to find that observers have constantly speculated as to the period when the gap was bridged, and the Frome and the strait now occupied by the River Solent were parts of a single river flowing through a continuous valley. The mode by which this continuity was destroyed, and the date of the break, are the next subjects to be dealt with.

As soon as the disturbed and bent strata of Hampshire rose above the sea, not only were they attacked by rain and rivers, but the waves of the sea began also to cut into the land, and to form cliffs. We do not know how far off the original sea-coast lay, for we do not yet know how far out into the English Channel the disturbed strata extended ; but one observation we can still make is strongly suggestive of a considerable land area to the south of the Solent even as late as Newer Pliocene times, or perhaps even later. The Isle of Wight now possesses three rivers, each of which rises in the anticlinal area and flows northward, through a deep gap in the Downs, to the Solent. In all respects these rivers behave like those rising near the central axis of the Weald, and flowing northward and southward out of the area, through deep notches in the much higher North and South Downs. We are justified in considering, therefore, that the Isle of Wight rivers originated in the same way, at a time when the anticlinal ridge dominated the whole country and rose far above the present chalk hills. If this anticline had not been sufficiently high when the land rose, the Medina would now flow eastward instead of northward. The same peculiarity marks the eastern and the western Yar, both of which are streams that have become greatly shortened by the cutting away of the southern and upper parts of their valleys, still fast disappearing under the inroads of the sea. It is clear that the present flow of water past Freshwater is

## A HISTORY OF HAMPSHIRE

insignificant compared with what must once have been. Perhaps the western Yar was always a smaller river than the Medina ; but the size of its valley, and the height of the chalk hills that it breaches, show that it must have drained a considerable area south of the Downs. If we desire to reconstruct the original basin of the Yar, and to connect with it the various ancient tributaries between Freshwater and Blackgang, which have now become detached, we must add a strip several miles in width to that part of the coast of the Isle of Wight.<sup>1</sup> When this is done the western Yar becomes a stream draining a similar district, and of about the same size as the Medina, where that river cuts the chalk down near Newport. This will account for the striking similarity of their valleys. With the southward extension of the land would necessarily go a westward extension at the Needles. But the southward extension we speak of is only the minimum amount, carrying us as far as the anticlinal axis, which coincided approximately with the limit of the basin of the Solent. There was probably a further extension at least as far south as would allow room for the southward slope of the anticlinal arch, and this at once gives us a land area of at least ten miles in width south of the chalk ridge. A reconstruction to a like extent of the Dorset coast connects the two areas, and the Solent then becomes an important river or estuary, with the Frome for its upper course. Into it flowed on the north the Stour, the Avon, the Lymington, and Beaulieu rivers, and Southampton Water ; while on the south it probably received a number of short tributaries, flowing from the comparatively close southern anticlinal ridge. Of these southern tributaries, the only one which still preserves its original catchment area is the Medina. The eastern and western Yar have both been sadly truncated, and the rivers between the Needles and Studland have now disappeared altogether. As the waves cut back into the old coast-line, they would breach in succession a series of hard ridges, and then work more freely in the soft rocks behind, in the way that has happened at Lulworth Cove, in Dorset. The final breach into the Solent valley occurred, in all probability, through some small lateral valley or gap in the chalk ridge. A breach of this sort, once started, would rapidly be widened by the sea acting on the much softer Tertiary strata behind, and also by the river, which now had its course abruptly shortened by over thirty miles.

The date at which the separation of the Isle of Wight from the mainland of Hampshire took place is, as already remarked, somewhat doubtful. It might be expected that an examination of the ancient terraces and gravels of the old River Solent would throw a light on the

<sup>1</sup> See W. Fox, 'When and How was the Isle of Wight Severed from the Mainland ?' *Geologist*, vol. v. p. 452 (1862) ; Codrington, 'On the Superficial Deposits of the South of Hampshire and the Isle of Wight,' *Quart. Journ. Geol. Soc.*, vol. xxvi. p. 528 (1870) ; also 'Geology of the Isle of Wight,' 2nd edit., pp. 222-228, 230-236, *Memoirs Geol. Survey* (1889) ; Sir John Evans, *Ancient Stone Implements of Great Britain*, 2nd edit., pp. 690-696 (1897).



## GEOLOGY

question ; but, unfortunately, though old river gravels are preserved, they have thus far proved entirely unfossiliferous, and without fossils we cannot feel sure of their age. As the gravels may at any time yield evidence which will throw a flood of light on the ancient history of the county, it may be well to give a few particulars with regard to them, though from their occurrence in small irregular patches they cannot be shown on the Geological Map accompanying this volume. For details we must refer the reader to the maps and memoirs relating to the county now being published by the Geological Survey.

The oldest stratified gravels on the mainland are apparently certain sheets occupying high plateaux, always sloping southward and eastward towards the ancient Solent. There are several outliers of these in the Isle of Wight, the most instructive being some which belong to the ancient valley of the Medina, but lie about three hundred feet above the present level of the river. The higher part of the valley has now been so greatly lowered by the action of rain and rivers, that its old surface has been completely destroyed. At the first place where the old valley-bottom has been preserved, its gravels cap St. George's Down at a height of three hundred and sixty-three feet, and rest on the Lower Greensand. They then fall steadily to the north, passing through the chalk hills by a wide shallow notch, and finally merging into the sheet which follows the eastward course of the main valley at a lower level. It is impossible at present to say to what extent the different outlying patches were formed contemporaneously ; but it is a curious fact that on each side of the Solent we meet with high-level gravels capping plateaux at levels up to four hundred feet above the sea, and falling to the north or to the south, towards the old river. One point of importance, however, is coming out in the course of the new Geological Survey of the county—it is appearing that, contrary to what was thought, the higher gravels are not continuous with the Palæolithic gravels which cap Bournemouth and Barton cliffs, but belong to an older period. The older gravels have subsequently been cut into and reconstructed ; but as far as is yet known where the stratification is undisturbed they never yield the traces of human occupation so abundant in the later deposits.<sup>1</sup> It is doubtful whether the gravels of this older series anywhere descend lower than one hundred and fifty feet above the sea, for at about that level they are cut off by an ancient cliff-line, which seems to be continuous with the old sea-cliff of Goodwood Park and Portsdown. No doubt the seaward edge of the gravels near Cowes, which seem to belong entirely to the older series, sinks below the ordinary level ; but this is probably due in large degree to the slow settlement which is constantly taking place in these hills of soft, soapy clay. There is no indication of a similar 'sag' where the gravels rest on firmer deposits.

The places where the older gravels can best be examined are St. George's Down, Bouldnor Cliff, and Headon Hill, in the Isle of

<sup>1</sup> See Reid, 'Geology of Bournemouth,' p. 10, *Memoirs Geological Survey* (1898).



## A HISTORY OF HAMPSHIRE

Wight. On the mainland they only touch the coast at Hengistbury Head ; but are well seen on St. Catherine's Hill, and on the higher plateaux of the New Forest, especially about Stony Cross and Bramble Hill Walk, where they reach four hundred feet above the sea, and are cut off by a bold escarpment towards the north. For some reason that cannot yet be explained these gravels seldom extend beyond the Tertiary areas, or spread over the higher chalk downs. They should be carefully searched for early traces of man, for though all bones and calcareous fossils have been dissolved out of them, they may contain flint implements—or even an especially fortunate seeker may find some spot where the fossils have not been destroyed.

The fossils found in the Eastern counties, where the successive stages of the Pliocene Period are marked by a continuous series of records, show a gradual lowering of the temperature, the animals also growing more and more like those now living in Britain. At last the climate became almost identical with that which we now enjoy, and the plants so familiar that any one of us wandering in the woods of those days, unless he were a botanist, would not have noticed any peculiarities in the trees. But an expert would have observed that the spruce-fir then grew wild, and that some of the then scarcer plants bore unfamiliar forms, not now to be found in Britain. Directly, however, he met any of the large mammals, this impression of familiarity would have been completely dispelled. The common animals were two or three different elephants, two species of rhinoceros, a hippopotamus, wild horse, ox, antelope, several deer, the *Machairodus* or sabre-toothed tiger, a gigantic beaver as big as a sheep, and numerous smaller species. This abundance of big game marked the close of the Pliocene, or ' Preglacial ' Period as it is sometimes called. The subsequent invasion of cold seems to have destroyed most of the large mammals, though certain of them lingered on, probably till they were exterminated by man. We have not yet discovered any of these peculiar species in Hampshire ; but at Dewlish in Dorset one of the most peculiar of them, an extinct elephant known as *Elephas meridionalis* has been found. This elephant was quite unlike the much more abundant mammoth of later times, but was equally large.

The period when the earliest of the gravels now found on the higher plateaux was deposited must have been very ancient, for since then deep and wide valleys have been formed, and the general level of the country has been greatly lowered. It does not appear to be ancient, however, when we take into account the enormous loss that the folded and upraised strata had already been subjected to. At St. George's Down, in the Isle of Wight, the gravels rest on the upturned edges of the Lower Greensand, which had there been exposed by the still earlier planing away of at least three thousand feet of superincumbent strata. Such facts as these help us to realize how vast is the break in the succession, and how lengthy must have been the period since Hampshire was first upheaved. The time that has elapsed since man is known to

## GEOLOGY

have appeared on the scene, sinks almost into insignificance when contrasted even with this small part of the geological record. Man, however, saw great changes in the appearance of Hampshire, and in this sketch we now draw near to the time when relics of his occupation begin to be found.

It is by no means easy to deal with the state of Hampshire during the Glacial Epoch, for the reason that the peculiar and characteristic deposits formed by glaciers or by floating ice in other parts of Britain are quite unknown within this county. Hampshire was beyond the limit of the great ice-sheet which covered nearly all Britain north of the Thames and Severn, and has left such characteristic traces in the 'boulder-clay' or 'till' found to the north of London. Hampshire also possessed no hills sufficiently high to give birth to local glaciers. We discover therefore no moraines, erratic-blocks, or ice-scratched stones, such as always mark the former course of a glacier, and this cuts us off from one most obvious method of distinguishing the deposits belonging to this period. As Hampshire was above the sea during the colder parts of the period, we do not find any of the erratics brought by floating ice, such as spread over the low ground of the coast regions in the adjoining county of Sussex. Another difficulty that meets us is the scarcity of remains of arctic animals, and the absence of the arctic plants which certainly in those days overspread the county. They are found in Wiltshire and in Devon; but in Hampshire only the reindeer has been discovered, and that rarely.

Under such circumstances it is allowable to piece together a connected story from the scattered records preserved in the adjoining counties, especially as these records, singularly enough, yield direct evidence that the ancient coast of Hampshire also did not altogether escape the action of floating ice. It is clear, too, that an arctic climate affecting Wiltshire must equally have affected Hampshire; and perhaps by drawing attention to the deficiency of the county records, we may lead to the discovery of equally interesting relics in this area.

If we go a few miles beyond the county boundary, into the Selsey peninsula, we meet with unmistakable relics belonging to this cold period, and in fact to the whole of the Pleistocene Period, of which the so-called 'Glacial Epoch' only represents one phase. The deposits of Selsey have long been known;<sup>1</sup> the lowest and earliest, resting on the Bracklesham Beds, is a coarse gravel, often containing blocks of far-transported rock of several tons in weight. These blocks are most remarkable, for they include a number of peculiar rocks of which the place of origin is perfectly well known. Among them are numerous masses of Bembridge Limestone, and of Greensand chert, derived from

<sup>1</sup> See Dixon, *Geology of Sussex* (1850), and 2nd edit. (1878); Godwin-Austen, 'On the Newer Tertiary Deposits of the Sussex Coast,' *Quart. Journ. Geol. Soc.*, vol. xiii. pp. 40-72 (1856); Lyell, *Antiquity of Man*, 4th edit., p. 330 (1873); Reid, 'The Pleistocene Deposits of the Sussex Coast . . .,' *Quart. Journ. Geol. Soc.*, vol. xlviii. pp. 344-361 (1892).



## A HISTORY OF HAMPSHIRE

the Isle of Wight. Large blocks of the hard fossiliferous sandstone which forms Bognor Ledge are also plentiful, and one of these was grooved and striated by the ice. Other masses up to five or six feet in length belong to rocks which could not have come from a nearer source than the Channel Islands or the coast of Brittany. A smaller fragment corresponds with the granite of Cornwall.

The occurrence of erratic blocks of such size on the Sussex coast points unmistakably to a period when the water of the sea was so cold that ice of considerable thickness could form along the shore during the winter. 'Ice-foot' of this sort accumulates every season in the Arctic regions, becoming thicker and thicker with the rise and fall of the tide, and with the accumulation of snow on its surface. Gradually the beach-stones get cemented into its base, and blocks loosened by the frost fall from the cliffs and become imbedded in its upper surface. When spring comes, the long ledge of ice becomes detached, breaks up, and floats away with its burden of soil and stones, which are gradually dropped as the ice melts, perhaps not till it has grounded on some distant shore. The Selsey erratics give us, therefore, most valuable information as to the condition of the country bordering on the English Channel at that period. In the first place, they show that there was a slight submergence of the lowlands, but that this submergence only amounted to some twenty or thirty feet; for the erratics, so abundant over the flats, do not occur above that level. Secondly, they prove that the water of the English Channel was not only cold enough to allow ice-foot to accumulate, but was so cold that it allowed the ice-floes to sail right across the Channel before they melted and deposited their heavy burden. Unless the temperature had been very low, the ice would have melted long before the wind could drive so flat an object so great a distance.

Thus the erratics found at Selsey, including as they do rocks that could only be derived from the Isle of Wight, prove that Hampshire also suffered from these arctic conditions. Shore-ice formed every winter at the foot of the cliffs; but perhaps no part of the existing land-area of Hampshire was submerged, for, with the possible exception of Hayling Island, it was too high. The encroachments of the sea have since been sufficient entirely to obliterate all trace of the grooving and scratching formed by the rock-laden ice-floes as they ground against the cliffs or rocky ledges. Such striation must have taken place, for, as already remarked, one of the masses from Bognor Ledge was strongly grooved on its flat face. That face had probably formed the surface of the half-tide ledge, over which the shore-ice ground and scraped, as it was carried to and fro by the tide and wind. At last the block became detached, was frozen into the ice-foot, was lifted with it, to be quietly dropped at Selsey, under the lee of the Isle of Wight.

Though certain of the Plateau Gravels belong in all probability to this first period of glaciation, we have at present no means of distinguishing them. Hampshire must then have suffered from a climate too



## GEOLOGY

rigorous for the growth of trees, except perhaps the alder and birch, and probably none but arctic mammals inhabited the country. No satisfactory evidence has yet been discovered that man entered Britain till after this first period of intense cold.

As was the case with earlier geological periods, it is impossible to obtain a perfectly connected history of these later stages ; all we can do as yet is to speak of the chronicles that have been preserved and discovered, ignoring almost entirely the gaps for which the records are lost. The next picture of Hampshire and Sussex that we see is quite different from the last. It shows a warmer sea bathing the coasts up to a height of about one hundred and forty feet above the present level. The animals living in it were mainly species that inhabit our seas ; but at Selsey they are mixed with a few belonging to the Mediterranean, and not now extending north of the Bay of Biscay. The old shore-line of this sea extends from Brighton and Goodwood Park in Sussex, to Portsdown Hill, where beach-shingle is found at a height of nearly one hundred feet above the sea.<sup>1</sup> Thence it is traceable as an obscure degraded cliff-line at intervals right across Hampshire, though unfortunately it yields no fossils. Different parts of this ancient marine deposit probably belong to slightly different stages ; for though the highest point reached by the sea was about one hundred and forty feet, over a considerable distance, beach-shingle is found a few feet above the present sea-level at Bembridge, and the 'raised beach' of Portland, which is full of littoral shells, is also at a comparatively low level. The old cliff-line seems to merge into a high river-terrace when traced up the Avon and Stour ; but whether this is of estuarine or of fluviatile origin is not clear in the absence of fossils.<sup>2</sup>

As the land rose again above the sea, marine gravels gave place to estuarine and lacustrine deposits, with bones of elephant and rhinoceros, and land and freshwater shells, some of which no longer inhabit Britain. These also are best seen in the Selsey peninsula ; but they also occur on the coast of the Solent, not far from the entrance to Southampton Water.<sup>3</sup> The locality is at Stone, about three miles south of Fawley, where a mass of estuarine clay, very similar to the modern mud of Southampton Water, has yielded a tusk of elephant, which from its straightness probably belonged to the *Elephas antiquus*, not to the mammoth. The clay is full of estuarine and freshwater shells, mixed with seeds of plants and trees, among which is the interesting South-

<sup>1</sup> See Prestwich, 'On the Presence of a Raised Beach on Portsdown Hill, near Portsmouth,' and 'On the Occurrence of a Flint Implement on a high level at Downton,' *Quart. Journ. Geol. Soc.*, vol. xxviii. pp. 38-41 (1872); Prestwich, 'The Raised Beaches, and "Head," or Rubble-drift, of the South of England ; their Relation to the Valley Drifts and to the Glacial Period' ; and 'On a late Post-Glacial Submergence,' *ibid.*, vol. xlviii. pp. 263-343 (1892).

<sup>2</sup> Reid, 'The Geology of the Country around Bournemouth,' *Memoirs Geol. Survey* (1898).

<sup>3</sup> Reid, 'A Fossiliferous Pleistocene Deposit at Stone, on the Hampshire Coast,' *Quart. Journ. Geol. Soc.*, vol. xlix. pp. 325-328 (1893).

## A HISTORY OF HAMPSHIRE

European maple, *Acer monspessulanum*, which does not now grow wild nearer than Central Europe. The plants show that the climate was still mild.

Though a deposit of mud with marine shells shows that the tide must then have flowed at least as far up as this point in the Solent ; yet it is not possible at present to say definitely whether the Solent was merely an estuary, or had already become a Strait. If we could trace the Pleistocene mud of Stone Point westward, till it merged into a shingle beach, as we passed beyond the shelter of the Isle of Wight and came within the influence of the waves, the question would be settled ; but this cannot be done.

The stage which succeeds is, in certain respects, one of the most interesting in the geological history of Hampshire. Man now makes his appearance, the stone tools and weapons that he used occurring in abundance in the cliffs of Hampshire, two or three waste flakes having been found directly above the clay with elephant-bones at Stone.

Though gravels of this age yield the first unmistakable evidence of man in Britain, it may be well to guard readers against the assumption that before this he had not entered the country. He may have occupied the land at an earlier period ; but in such small numbers that his remains and weapons have been overlooked. Or the earliest races may not have used stone weapons worked in any way ; in which case we should know nothing about them, for almost the only relics of Palæolithic man known in Britain are his weapons and tools, his bones having almost entirely disappeared. Hampshire, as far as is known, was occupied at as early a date as any of the counties ; for there is evidence that the Palæolithic implements of all of them belong approximately to the same stage in geological history as that with which we are now dealing. The supposed Preglacial implements of the Norfolk coast seem clearly to be of natural origin, and there is no reason for supposing that the implements found scattered on the high plateaux of Kent are any older than those found in the stratified gravels at lower levels in Hampshire and elsewhere. Man and his implements, however, will be dealt with in later chapters ; here we will only speak of the geological date of his arrival, and of the physical condition of the country at the time of his appearance.

Owing to the difficulty of finding bones, shells, or seeds in exactly the same layers as those which yield the Palæolithic implements, there is still much doubt as to the climatic conditions which held when Palæolithic man first lived in Britain. Many hundreds of his implements have now been discovered within the county ; but not one appears to have been associated with other fossils. The estuarine mud at Stone, and the corresponding deposits at West Wittering and Selsey, in Sussex, indicate perfectly clearly the climatic and geographical conditions which then held ; but though they have been carefully searched, thus far they have failed to yield the slightest trace of man. His relics occur in the stratum immediately above ; but we cannot be



## GEOLOGY

sure how long an interval separates the two deposits, or whether in this interval the climate may not have changed completely. The relative level of sea and land does not seem to have altered more than a few feet, if at all.

The Palæolithic gravel forms a wide belt, sloping down towards the Solent and towards the main rivers, but unconnected with the smaller valleys. Its higher limit, in the southern part of the county at any rate, usually coincides approximately with the old shore-line at one hundred and forty feet above the sea. The exact conditions under which this gravel was deposited are not clearly understood, for it seems very doubtful whether it was a deposit formed by ordinary river-action.

Though the Palæolithic deposits of Hampshire are so sparingly fossiliferous, a few miles beyond the border, at Salisbury, there is a noted fossiliferous brickearth, which has been most carefully studied by Dr. Blackmore and other observers.<sup>1</sup> Here a Palæolithic implement was found associated with numerous bones of land mammals and actually beneath remains of the mammoth. The mammals include, besides the elephant and rhinoceros, several Arctic species, such as the musk-ox, lemming, and reindeer, as well as bison, ox, horse, several deer, and hyæna. It is not improbable, however, that this brickearth belongs to a somewhat later period than the gravels we have just been describing. It lies at a level considerably lower than the Palæolithic gravel on the ridge above, and may point to a further deepening of the valley, between the two epochs.

As the valleys continued to be deepened and widened, lower terraces were formed, and on these throughout Hampshire are found sheets of gravel and brickearth, often with bones of mammoth. The gravel consists largely of broken or unworn flints swept directly from the Chalk Downs, and not derived, to so large an extent as the older series, from pre-existing gravel deposits. Its composition and mode of occurrence are strongly suggestive of winters of Canadian severity; during which the surface of the Chalk was shattered and deeply frozen, so that for a considerable time the spring rains could not penetrate, but flowed in mountain torrents over the impervious Chalk, gradually thawing and carrying away the shattered superficial layers. The mammals found at Fisherton strongly point to such conditions. In Hampshire the reindeer has been found in these low-lying gravels at Southampton Docks. The land seems to have been a few feet above its present level, for the old channels filled with gravel in places descend beneath the sea, without yielding marine fossils.

Gradually, step by step, the river valleys were deepened till the contours of the country became much as they now appear, except that the Solent and Southampton Water were less wide, and the coast-line extended some distance further out to sea. We do not know how long the land stood at that level and the climate remained cold; for at this

<sup>1</sup> Stevens, *Flint Chips*, p. 47 (1870); Evans, *Ancient Stone Implements of Great Britain*, 2nd edit., pp. 627-631 (1897).



## A HISTORY OF HAMPSHIRE

point comes in another imperfectly understood period of transition, during which Palæolithic man, who only used chipped and flaked stone weapons, gave place to a race, the Neolithic, that used implements of polished stone.

The next record that we can obtain, shows the land standing at least fifty feet above its present level, so that the sea had retreated, the estuaries had become freshwater rivers, and the lower valleys were cut to a depth of about sixty feet below their present bottoms. This elevation must have laid dry great part of the bed of the Solent ; but whether it actually caused the Isle of Wight to become part of the mainland is not clear. It will not do to take a chart, and say that everything down to the ten-fathom line must have been dry at that period ; for the question is greatly complicated by the rapid denudation of the cliffs and the great scour of the tides. These are constantly supplying material, which is transported from place to place, and accumulates to so great an extent that the two forts in the sea at Spithead show ninety and seventy feet of 'recent marine deposits' respectively, overlying the Bracklesham Beds.<sup>1</sup> It is quite possible, therefore, that when the land stood sixty feet higher, the Isle of Wight was still an island, though the Solent was certainly a good deal narrower than now.

During this period of elevation, forests of oak and pine overspread the flat area left dry by the retreating sea ; and as the land again sank, the old valleys were filled up with alternating layers of gravel, shell-marl, silt, peat, and estuarine mud, periods of rest being marked by vegetable soils containing the abundant roots of trees. These ancient soils, when again laid bare by the action of the waves on the foreshore, form the well-known 'submerged forests' which fringe our south coast and are found in every dock-excavation. In the recent excavations at Southampton one of these submerged land-surfaces was passed through beneath the estuarine mud. Messrs. Shore and Elwes, who carefully examined the sections as they were laid bare, mention that 'the peat contained much oak, some large trunks *in situ*, lying as they fell, with roots passing down into loam beneath. . . . There were also abundant remains of the beech and hazel, and some remains of the birch and pine, mostly in a pulpy condition.' A very fine specimen of a round hammer-stone was found near the bottom of the peat, twenty feet below the surface of the tidal mud. The peat yielded also some flint-flakes and a bone needle, as well as bones of the gigantic ox (*Bos primigenius*), wild horse, red deer, boar, hare, and reindeer.<sup>2</sup> It may be observed, however, that the reindeer does not necessarily point to a climate colder than that we now possess ; for it lived within the historic period in Scotland, and may well have migrated far south in the winter, in days when the country was but sparsely populated.

This excavation at Southampton is only mentioned as one of the

<sup>1</sup> 'Geology of the Isle of Wight,' 2nd edit., pp. 310-313, *Mem. Geol. Survey* (1889).

<sup>2</sup> Shore and Elwes, 'The New Dock Excavation at Southampton,' *Proc. Hampshire Field Club*, for 1889, pp. 43-56.

## GEOLOGY

instances in which these submerged forests have been met with below the level of the lowest tides ; but they occur round our south and east coasts opposite nearly every valley. One is to be seen on the foreshore at Bournemouth, opposite the mouth of the Bourne Valley, and it is interesting to observe that it is full of the remains of the pine. Subsequent to the growth and destruction of this ancient wood, the pine became locally extinct—most likely through the attacks of some parasite, for there is no evidence of a climatic change. Now it has been reintroduced and is spreading rapidly.

A noteworthy result of this elevation of the land and deep erosion of the valleys is that in the lower part of their courses the Hampshire rivers now flow through wide alluvial plains, which are still liable to occasional floods. No doubt when the subsidence first took place, these submerged valleys in many cases became arms of the sea, as Southampton Water and Portsmouth Harbour still remain, and the presence of these numerous inlets must have had an important bearing on the early settlement of the country. During the Neolithic Period, when this subsidence was in progress, they must have formed important highways ; but since that time, probably for a period of about three thousand years, there seems to have been no further change in the relative level of land and sea in Hampshire. All the harbours and estuaries in the south and east of England tend to silt up and to become narrower. It is very difficult to obtain precise information as to the extent to which these harbours and arms of the sea were navigable in historic times. The relation of the Roman roads and settlements to the position of navigable waters and harbours, and to landing-places and fords, is an interesting subject and needs further study ; it is difficult, however, to examine records buried beneath the tidal mud of an old silted-up harbour, unless extensive works are made, like those of Southampton Docks. The only other noteworthy changes in the country during and since Neolithic times come under two heads. In the first place, the subsidence of the land necessarily rendered the streams more sluggish, owing to their decreased fall per mile ; it also raised the level of the water within the rocks. Both these causes combined to encourage the growth of peat over the lowland and hollows ; and the whole of the deeper peat-mosses within the county seem to date no further back than to the last period of subsidence. There is not much hill-peat, such as occurs in the northern counties, though the Plateau Gravels and Tertiary strata have often a wet peaty soil. The other changes that have taken place since sea and land stood at their present level are due to the agency of the sea. The waves have carved the coast into bay and headland, and into vertical cliff or tumbled undercliff, according to the nature of the stratum on which the sea acts. The broken material has been ground into pebbles and sand, and the mud has been swept out to sea or deposited in the harbours. The larger stones, driven by the waves caused by the prevalent wind, have gradually formed long spits, which threaten to block the mouths of the harbours, and steadily drive to the



## A HISTORY OF HAMPSHIRE

eastward the outlets of the rivers. There is one of these spits at the mouth of Christchurch Harbour ; another half blocks the entrance to the Solent, extending a mile and a half from the land and ending in Hurst Castle ; a third, a spit submerged at high water, drives the outlet of the Beaulieu river nearly two miles to the east. At the mouth of Southampton Water is another shingle spit ; but here, in the sheltered water of the Solent, the force of the waves is not so great, and the accumulation is more slow. At Portsmouth, Hayling Island, and at the mouth of Brading Harbour, sand-dunes have accumulated, and blown sand forms a ridge at the top of the Bournemouth cliffs ; the formation of sand-dunes, however, has not taken place on so large a scale as in the more western counties.

The various agencies which, in the course of long geological periods, have combined to build up and to shape Hampshire to its present contours, and to give it its existing characteristics, have now been indicated. What the contours are will best be understood from a study of the Maps ; but we will summarize in a few words the effects of the complicated series of changes that have been described in the foregoing pages. The folding and subsequent denudation that the strata have been subjected to, though they have resulted in some very picturesque scenery, do not happen to have brought within reach any of the valuable minerals for which men sink mines. Hampshire produces building material for itself ; but in other respects its mineral wealth is certainly not such as to lead us to dwell on the subject.

The county may be divided into several well-marked regions of unequal size, the character of each depending largely on its geological structure. On its north-eastern border, from Aldershot to Kingsclere, there lies an area of moderate elevation, which belongs to the London Basin and drains towards the Thames. It may be described as consisting principally of sandy heaths, two hundred or three hundred feet above the sea, overlooking lower and more fertile clay-lands.

The next natural division, on the east, takes in the district, north of Petersfield and east of Fareham, belonging to the Weald and draining partly northward by the Wey to the Thames, partly southward by the Arun to the English Channel. This area consists of clay and mixed lands of low elevation, on the Gault, Upper Greensand and Lower Chalk. From beneath these appear the sandy strata of the Lower Greensand, rising successively and forming steep escarpments facing eastward, which culminate within the county, near Hind Head, in elevations exceeding eight hundred feet.

Next follows the region of the Chalk Downs, a district of very uniform characteristics, which covers about two-fifths of the county. It consists of smooth rolling downs, wooded where overlain by a sufficiently deep soil of Tertiary debris, but in other places singularly bare. This region may be described as extending roughly from Basingstoke to Bishops Waltham, and from Andover to Alton. On the north-east it sends out a spur which becomes the North Downs, and on the south-



## GEOLOGY

east another and broader spur, which becomes the South Downs. To the west it is continuous with Salisbury Plain. Besides this main area, there are three outliers of the same character. The first is the bare chalk-ridge of Portsdown Hill; the second is the central ridge and Downs of the Isle of Wight—sometimes known as the ‘backbone’ of the Island; the third includes only the isolated chalk hills of the southern part of the Isle of Wight. Almost the whole of the main Chalk area drains southward into Southampton Water, by the rivers Test and Itching. It all lies at some elevation, but at only a few points does it reach eight hundred feet.

The general character of the Tertiary area of the Hampshire Basin has already been described. It is about as large as the Chalk district, and consists in the main of lower ground, though reaching four hundred feet in the northern part of the New Forest. The central parts are so covered with sheets of flint-gravel, and in the New Forest are so water-logged, as to be of no great agricultural value. Most of the New Forest must always have been waste, only valuable as rough pasture or for hunting, and can never have been thickly populated.

The remaining natural district takes in the part of the Isle of Wight south of the central ridge of Chalk. It is similar in general character to the corresponding area near Petersfield; but the more irregular geology and the attacks of the sea have combined to give rise to scenery of more varied character, and this irregularity has been greatly added to by the extensive landslips of the coast.





# PALÆONTOLOGY

**A**LTHOUGH remains of Pleistocene mammals are common in the high level gravels near Salisbury, in Wiltshire, while teeth referred to *Elephas antiquus* have been obtained in a mud-deposit near Selsea Bill, in Sussex, and molars of *Elephas meridionalis* at Dewlish, Dorsetshire, the mainland of Hampshire itself seems to be singularly deficient in such remains. At Fordingbridge, about ten miles below Salisbury, molars of the mammoth (*Elephas primigenius*) have, however, been discovered in the high level gravels of the Avon valley ; and a single tooth of the same animal was also obtained many years ago at Swathling, near Southampton, in the valley of the Itchen. From a clay deposit at Stone, near Fawley, the tusk of an elephant assigned to *E. antiquus* has likewise been disinterred.<sup>1</sup> And the superficial deposits excavated during the recent dock-works at Southampton have yielded remains of the aurochs, or wild ox (*Bos taurus primigenius*), the wild horse (*Equus caballus fossilis*), the red deer (*Cervus elaphus*), wild swine (*Sus scrofa ferus*), hare (*Lepus europæus*), and European reindeer (*Rangifer tarandus typicus*).

From the superficial gravel near Bramshaw, a hip-bone, supposed to belong to the so-called *Bos longifrons* (a domesticated breed of ox), has likewise been recorded. In the Isle of Wight remains of the Pleistocene mammals are far less uncommon, bones and teeth of the mammoth (*Elephas primigenius*), the woolly rhinoceros (*Rhinoceros antiquitatis*), wild horse, wild ox, or aurochs, red deer, and wild swine having been disinterred from the gravels of the Medina valley. The British Museum possesses an imperfect molar of the mammoth from Freshwater, and likewise part of the lower jaw of a red deer from No Man's Land shoal, off the Isle of Wight.

Much more interesting and important are the vertebrate remains obtained from the Oligocene and Eocene fluvio-marine strata of the mainland and the Isle of Wight, since similar remains are confined in Britain to the Hampshire basin, which only to a limited extent embraces the adjacent counties of Sussex, Wilts, and Dorset. Lemurs, now confined to Africa, Madagascar, and the Indo-Malayan countries, are represented by *Microchærus erinaceus* from the Oligocene beds of Hordwell, of which the original skull is preserved in the British Museum. It appears to have been distantly allied to the galagos, or African lemurs. On the other hand, *Adapis magna*, teeth of which likewise occur at Hordwell,

<sup>1</sup> See chapter on 'Geology.'

## A HISTORY OF HAMPSHIRE

seems to have been more nearly related to the Malagasy lemurs. An insectivorous mammal (*Necrogymnura*), allied to the Bornean tree-shrews, is also represented in the Hordwell beds. Here likewise we have an extinct species of civet (*Viverra bastingsiæ*), as well as *Hyænodon minor*; the latter, together with *Pterodon*, of which a tooth from the Bembridge limestone is preserved in the British Museum, belonging to a totally extinct group of Carnivora. With *Dicbodon cervinus*, remains of which occur both at Binstead and Headon in the Isle of Wight, and *D. cuspidatus*, from Hordwell, we come to two small Ungulates foreshadowing the modern ruminants; while *Ancodus*, or *Hyopotamus*, of which teeth are comparatively common at Hempstead, between Yarmouth and Cowes, is in many respects intermediate between the ruminants and the pigs. At Hordwell it is represented by *Diplopus aymardi*, which apparently differed by the reduction of the toes from four to two on each foot. *Anthracotherium*, which occurs both at Hempstead and Hordwell, differs by the lower and less crescentic cusps on the crowns of the teeth; while the gigantic *Elotherium* from Hempstead, and the smaller *Chæropotamus* from Binstead, were, so far as the structure of their molar teeth goes, more decidedly pig-like animals. A totally extinct type of Ungulate is *Anoplotherium*, of which teeth and bones belonging to several species occur in the Oligocene deposits of the Isle of Wight; they were long-tailed animals, attaining in some cases the dimensions of a small mule, with either two or three toes to each foot. Another representative of the same group is *Dacrytherium ovinum*, remains of which have been found both on the mainland at Hordwell, and at Headon Hill in the Isle of Wight.

The tapir-like *Palæotherium*, of which remains are so abundant in the gypsum-quarries of Paris, also occurs at Hordwell as well as at Bembridge; the large *P. magnum* is the typical representative of the genus, but the smaller *P. annectans*, often separated as *Paloplotherium*, likewise occurs at Hordwell. Teeth from the Bembridge limestone indicate the occurrence in the Isle of Wight of *Anchilophus*, one of the ancestral types of the horse. The Rodentia are but poorly represented in the Hampshire deposits, but lower jaws have been assigned to the extinct continental genus *Theridomys*. Great interest attaches to a caudal vertebra of a whale in the British Museum from the Oligocene strata of Roydon, Hants, which has been named *Balænoptera (?) juddi*, and is the oldest representative of the modern whales yet known. The skull of a *Zeuglodon*—primitive Cetaceans with double-rooted and serrated trenchant cheek-teeth—has, however, been recorded from the Eocene beds of Barton, and is the only specimen of the genus known from Britain. Lastly, the Hordwell beds have yielded numerous lower jaws, which indicate the existence of small species of opossums (*Didelphys*) in the south of England during the Tertiary period.

Bird remains are scarce in the Hampshire deposits, but a few bones from Hordwell cliff indicate the occurrence of several distinct types. *Actiornis anglicus* appears to be allied to the cormorants; *Ibidopsis hord-*



## PALÆONTOLOGY

*welliensis* is a relative of the ibises ; *Elornis anglicus* has relationships with the flamingoes, and *Agnopterus bantonienensis* seems to be likewise intimately connected with that group. *Grus hordwelliensis* is an extinct species of crane, while *Geranopsis hastingiae* is an allied type. *Colymboides anglicus* is a fossil diver, related to a species whose remains are found in the Oligocene strata of France, while the affinities of *Macrorhis* are unknown.

Passing from birds to reptiles, the remains of the latter found in the Tertiary beds are not very numerous, but indicate relationships with types now restricted to the warmer regions of the globe. One of the best known is a peculiar extinct generic type of alligator, represented by *Diplocynodon bantonienensis* at Hordwell, and by the same or an allied species at Hempstead and in the Barton beds at Lymington. From modern alligators this extinct type differed by having a pair of enlarged teeth close together on each side of the upper jaw. At Hordwell there occur remains of two large python-like snakes—*Paleryx rhombifer* and *P. depressus* ; while the same deposits have likewise yielded remains of a lizard (*Iguana europæa*), identified with a genus now restricted to tropical America. Soft-shelled tortoises belonging to the widely-spread existing genus *Trionyx* also occur both at Hempstead and Hordwell ; the remains from the latter locality indicating at least four species. A totally extinct generic type of the same group is indicated by *Aulacochelys circumvallata*, which appears to be peculiar to Hordwell. The beds of the latter place also contain shells of two species of terrapins, or river-tortoises—*Ocadia crassa* and *O. oweni*, both of which belong to a genus now represented only by a single species from China. On the other hand, *Trachyasps bantonienensis*, from Hordwell, is a rough-shelled tortoise belonging to an extinct genus of a family now restricted to North America. Even more remarkable are the fragments from Hordwell on which the species *Anostira anglica* has been founded, since these belong to an extinct North American genus of tortoises with affinities to types now restricted to the southern hemisphere.

Of much greater interest and importance than the foregoing are the numerous remains of reptiles obtained from the freshwater Wealden strata of the Isle of Wight, since all these belong to totally extinct generic (and often ordinal) types, while many of them are remarkable for their dimensions, and others as being unknown from any other part of the world. In the Wealden of the island the flying pterodactyles are represented by the large *Ornithochirus nobilis* ; while certain remains from Brook, described as *Ornithodesmus cluniculus*, have been regarded as indicating the existence of a bird, although they are more probably of reptilian origin. At least four distinct types of crocodiles, respectively known as *Goniopholis minor*, *Heterosuchus valdensis*, *Hylæochampsia vectensis*, and *Suchosaurus cultridens*, also occur in the Wealden of Brook and other localities in the island ; all these being widely different in structure from any existing members of their order.

Next to the crocodiles comes the order Dinosauria, which includes the largest of all land animals, and of which remains are very abundant



## A HISTORY OF HAMPSHIRE

in the island. From the Upper Greensand of Brook have been obtained certain large tail-vertebræ, which may be known as *Titanosaurus anglicus*, vertebræ of a similar type occurring in India, Argentina, and Madagascar. More or less closely allied was the huge dinosaur properly known as *Hoplosaurus armatus*, but frequently termed *Ornithopsis bulkei*. It is typified by a single tooth from Brixton, and represented by a jaw, a pelvis, and numerous vertebræ from Brook, Sandown, etc. This enormous reptile, which was probably 70 or 80 feet in length, walked on all fours, and had the sides of its huge vertebræ hollowed out in order to lessen their weight. A much smaller dinosaur of the same type is *Pleurocælus valdensis*, of which both teeth and vertebræ are known. To the same group belong some tail-vertebræ from Brook which have been named *Morosaurus brevis*, and a humerus from Sandown which forms the type of *Pelorosaurus conybeari*. In striking contrast to these monsters were the little biped dinosaurs known as *Cælurus daviesi* and *Aristosuchus pusillus*, both of which were discovered at Brook by the late Rev. W. Fox. Their vertebræ were so hollowed out by air-cells as to consist of but little more than shells supported by internal columns. Teeth of one of the carnivorous dinosaurs—*Megalosaurus oweni*—have likewise been obtained from the Wealden of the island. Nor were those members of the group which were protected by external armour wanting, *Hylæosaurus oweni*, of the Sussex Wealden, being represented by a humerus from Brixton; while from Barnes Chine, Brixton, has been obtained the entire dermal armour of a very strange form described as *Polyacanthus foxi*. Cowleaze Chine has yielded the nearly entire skeleton of a small biped herbivorous dinosaur, for which the name of *Hypsilophodon foxi* has been proposed. Giant relatives of this latter are the two species of *Iguanodon*, namely, *I. mantelli* and *I. bernissartensis* (*seelyi*), whose bones are among the most common of the reptilian remains found in the Wealden strata of the island. These huge reptiles (one of which stood considerably over twenty feet in height) walked on their hind legs alone, with some support from the massive tail, and have left their three-toed bird-like tracks on many of the sandy beds of the south coast of England. A much smaller representative of the *Iguanodon* group was *Camptosaurus valdensis*, of which the remains were obtained from Cowleaze Chine, while *Spheospondylus gracilis* is yet another dinosaurian type named on the evidence of bones from the Wealden of the Isle of Wight.

As might have been expected, remains of freshwater turtles are not wanting from the Hampshire Wealden; the species hitherto recorded from those deposits in the island being named *Tretosternum punctatum*, and *Plesiobelys valdensis*, and *P. brodiei*. The two last (like the one to be next mentioned) belong to a group now restricted to the southern hemisphere, *P. brodiei*, being named from a specimen from Atherfield formerly in the collection of the Rev. P. B. Brodie. Lastly, a turtle from the Upper Greensand of the island has been described as *Hylæochelys* (?) *lata*.

Of fossil fishes recorded from Hampshire and the Isle of Wight, the following may be mentioned, although the list makes no pretence to

## PALÆONTOLOGY

being complete. From a grey shaly clay, belonging to the Osborne group, at King's Quay in the north of the Isle of Wight, have been obtained numerous beautifully preserved specimens of a small herring (*Diplomystus vectensis*). The Barton beds of the mainland have also yielded spines and ear-bones of at least two species of cat-fishes (*Arius egertoni* and *A. bartonensis*), belonging to a genus still surviving in some of the warmer rivers of the Old World; and remains referable to the same group likewise occur at Headon Hill, in the Isle of Wight. Saw-fishes are represented in the Barton beds by *Pristis bisulcatus*; while remains of a skate (*Raia similis*) are also found in the same formation. Of pavement-toothed rays, no less than three species of *Myliobatis*, namely, *M. dixonii*, *M. striatus* and *M. toliapicus*, have been recorded from Barton; and the same deposits have likewise afforded remains of an Eagle Ray (*Aëtobatis irregularis*). The comb-toothed sharks are represented at Barton by *Notidanus primigenius*; and among the simple-toothed members of the same group *Lamna macrota*, *L. obliqua*, *Odontaspis elegans*, and *O. cuspidatus* likewise occur; remains of the last-named species having also been recorded from Brockenhurst and Headon Hill. Jaws of a fish (*Edaphodon leptognathus*) belonging to the same group as the existing *Chimæra* have been described from Barton; as well as remains of a Bony Pike (*Lepidosteus fimbriatus*) from Hordwell, and of a second member of the same genus (*L. cuneatus*) from the Eocene of the Isle of Wight. A sturgeon (*Acipenser*) also occurs.

Among Chalk fossils some of the most beautiful are the crushing teeth of the ray-like *Ptychodus*; specimens of those of *Pt. polygyrus* occurring in the Chalk near Winchester. From the Upper Greensand of Ventnor have been obtained shark-teeth assigned to the species *Oxyrhina mantelli*; while the same formation at Kilmerton, Isle of Wight, has yielded teeth of the barracuda-like *Protosphyræna*. The beautifully polished scales and button-like teeth of *Lepidotus mantelli* have been recorded from the Wealden of the Isle of Wight, which has also yielded remains of the four species of fish respectively known as *Belonostomus cinctus*, *Oligopleurus vectensis*, *Hybodus bassanus*, and *Acrodus ornatus*, the two latter being sharks.

To give an adequate account of the Invertebrate fossils found in the Tertiary deposits of the Hampshire basin would require an amount of space far beyond the whole of that allotted to this section of the work. The Hempstead beds of the Isle of Wight yield shells of a mixed freshwater and estuarine type, for the most part belonging to genera still existing. The bivalves *Corbula pisum* and *C. vectensis* are very characteristic of the highest strata, while below these are many species of the univalve genera *Cerithium*, *Melania*, and *Paludina*, and of the bivalve *Cyrena*, *Cyclas*, and *Unio* (pond-mussel). The lower division of the Bembridge marls is best characterised by a peculiar species of oyster (*Ostrea vectensis*); while the underlying Bembridge limestone chiefly contains land and pond-snails belonging to the genera *Helix*, *Limnæa*, *Planorbis*, and *Bulimus*. The finest of these is the large *Bulimus ellipticus*, perfect specimens of which have fetched a guinea each. Freshwater



## A HISTORY OF HAMPSHIRE

molluscs of distinctive types are likewise characteristic of the Osborne group of beds ; but when we come to the Headon group we have alternations of freshwater and marine fossils. For instance, the Upper Headon clays and sands contain species of *Paludina*, *Melania*, *Limnæa*, *Cyrena*, *Corbicula*, and other freshwater and estuarine types ; whereas in the Middle Headon, as represented by the Brockenhurst beds, we have distinctly marine types of molluscs, such as *Voluta*, *Typhis*, *Pleurotoma*, *Ostrea*, *Cytherea*, etc. On the other hand, when we descend to the Lower Headon, of which the Hordwell beds are the equivalent on the mainland, we again encounter freshwater and estuarine shells. The only other Tertiary molluscs which space admits of mentioning are those of the Upper Eocene Barton beds, which, like those of the formations already referred to, are absolutely peculiar to the county. All are marine, and the majority belong to existing generic types, now for the most part restricted to the warmer seas. Among the most characteristic molluscs, mention may be made of *Rostellaria rimosa*, *Voluta luctatrix*, *Fusus longævus*, *F. pyrus*, *Typhis pungens*, *Murex asper*, *Conus dormitor*, *Phorus*<sup>1</sup> *agglutinans*, *Calyptrea tuberculata*, and *Sanguinolaria compressa*. Not only are these Barton shells remarkable for their profusion, but likewise for their beauty of form and their exquisite state of preservation.

In the Lower Bagshot division of the Eocene the leaf-beds of Alum Bay and Bournemouth have yielded to botanists leaves and other remains of a very large number of plants, all of which indicate the prevalence of warm climatic conditions at the time of their entombment. The Alum Bay beds are specially distinguished by the preponderance of leguminous plants, while at Bournemouth trees (including *Eucalyptus*, *Araucaria*, alder, poplar, elm and plane) and hard-wooded shrubs are more abundant.

Of the Invertebrate fossils of the Hampshire Chalk, Upper Greensand, etc., no special mention need be made, since they are for the most part identical with those of the corresponding formations from other parts of England. The fossils of the Atherfield beds, in the Isle of Wight, which belong to the Lower Greensand series, are, however, decidedly remarkable. Specially noticeable is the occurrence of a number of representatives of the mussel-group, such as *Perna mulleti* and the elongated *Gervillia alæformis*. In one stratum remains of crustaceans are so numerous as to have given rise to the name of 'lobster-clay' ; the most abundant forms being a crayfish (*Astacus vectensis*) and an extinct generic type known as *Meyeria magna*.

The fauna of these Atherfield beds is marine, as is likewise that of the upper portion of the underlying Wealden series ; but lower down in the latter undoubted freshwater fossils, such as the Wealden pond-mussel (*Unio valdensis*), as well as *Cyrena* and *Paludina* are met with. Plant remains also occur in the Wealden beds of Brook, among these being a conifer belonging to the extinct genus *Pinites*.

<sup>1</sup> The writer is well aware that this and certain other generic names mentioned above have no right to stand, but, as being those in common use, they are retained here.



# BOTANY

THE subject of Botany<sup>1</sup> as forming part of the history of a county suggests a history of the native vegetation from the earliest times ; it seems to demand an answer to the questions from whence and at what time came the trees and shrubs which constitute our native forests and thickets, the herbs which have made their home on our cultivated land, or cover our uncultivated soil, or teem in our ditches, ponds and rivers ? In the attempt to answer these questions, we first ask how far the vegetation of Hampshire differs from that of other counties, and finding that there is a similarity in character, we next ask whether this occurs elsewhere, and we learn that it exists in the adjacent continent and over a much more extended area, even beyond Europe. Hence, in order to trace the origin of the vegetation of a county, we are landed in an enquiry too vast for consideration in these pages, for I may point out that, taking the *London Catalogue of British Plants*, Ed. 9, which puts the British Flora at 1,958 species, as the standard, only about 316 species are restricted to Europe, that about 250 reach the Himalayas, that 450 reach America, and nearly 100 the southern hemisphere ; also that some species belonging to the cool temperate zone are cosmopolitan, as the common Dandelion (*Taraxacum officinale*), the Club moss (*Lycopodium clavatum*), and the Mouse-ear chickweed (*Cerastium triviale*), etc.<sup>2</sup>

We must therefore content ourselves with a rapid survey of the Flora of Great Britain, and of Hampshire as a component part of it. It is remarkable that endemic species are not found in Great Britain, if we except those of so-called polymorphic species and of varieties.<sup>3</sup>

<sup>1</sup> I desire here to record my indebtedness and thanks to the following correspondents : Miss E. C. Palmer, Miss E. M. Williams, Miss Woodhouse, Messrs. F. H. Arnold, J. G. Baker, F.R.S., F.L.S., Arthur Bennett, F.L.S., C. B. Clarke, F.R.S., F.L.S., Samuel Forrest, W. C. Geldart, Charles W. Greenwood, J. and H. Groves, F.L.S., A. B. Jackson, Bolton King, Wyndham S. Portal, H. Weaver, William Wickham, the Revs. H. Purefoy Fitzgerald, F.L.S., J. E. Kelsall, E. F. Linton, W. R. Linton, Edward S. Marshall, F.L.S., T. A. Preston, F.L.S., W. Moyle Rogers, F.L.S., J. Vaughan, the late Thomas Woodhouse, etc. To Mr. C. B. Clarke I am indebted for valuable assistance in many ways and especially in looking over MS. and proofs.

<sup>2</sup> J. G. Baker's *Botanical Geography*, p. 105 (Lovell Reeve).

<sup>3</sup> Mr. Arthur Bennett considers that an exception should be made in the case of *Potamogeton lanceolatus* which he believes to be an endemic species, and Sir Joseph Hooker, out of the whole English Flora, names five 'comparatively well limited species,' of which Hampshire possesses two, viz., *Cenante fluviatilis* and *Spartina Townsendi*.

## A HISTORY OF HAMPSHIRE

This fact is an evidence that the British Flora must be of comparatively recent date as regards its introduction, and that our island has not been isolated from the continent long enough for endemic species to have been generated. In this conclusion we are borne out by geological testimony.

Great Britain though now an island was once part of a continent, and it will be of interest to ascertain as far as we are able at what time it was first peopled with the living forms or species by which it is now inhabited. The climate of the eocene age, as is shown by its fossils, was a tropical or semi-tropical one, and its flora has disappeared; of the climate of the miocene age we have no record in England. During the pliocene age the climate gradually cooled, and the cold during the pleistocene age, throughout two or more long periods, became so intense that the whole vegetation which survived must have been arctic and all other have become destroyed. Though evidence is wanting that the southern portion of England including Hampshire was glaciated, yet the climate, from the immediate vicinity of glaciation, could have supported none but an arctic flora, and we have proof that arctic plants once occupied the low land of Devonshire and therefore in all probability that of Hampshire. At this time the severance of Great Britain from the Continent was probably effected. It has been generally supposed that dispersal of species took place mostly before severance, but Mr. Clement Reid in his recent work on the *Origin of the British Flora*<sup>1</sup> gives data for supposing that our present flora, excluding the arctic one, came by other means than by land from the adjacent continent. It should be remembered that the severance must have been very gradual, that subsidence and upheaval of the land occurred, and that the width of the channel must have been broken and narrow at first and that it has been since continually widening by the action of the sea.

I have already remarked that the geological record as far as it is accessible bears out the conclusion that our present flora is of comparatively recent date and is a component part of that which occupies the adjacent continent. Mr. Clement Reid has carefully examined the seeds found in the tertiary deposits from about seventy-four different stations in Great Britain and Ireland and the adjacent continent; knowing that the stems, leaves, and flowers of herbaceous plants are easily broken up and decomposed, but that seeds and seed-vessels are in most cases far less perishable, he set himself to collect these and to refer them to the various plants which bore them. The seeds he collected belong to over 250 species and only seven of these are not now to be found in our native existent flora, but they are still members of the continental flora. One of the stations examined is at Stone in Hampshire and is of pleistocene and interglacial age.

The oldest deposit examined is at Cromer in Norfolk, which is pliocene and pre-glacial. The site of the Roman City at Silchester was

<sup>1</sup> *The Origin of the British Flora* (Clement Reid, F.R.S., F.L.S.; Lond., Dulau & Co.), p. 39.



## BOTANY

another of the stations from which seeds were collected, and it is notable that several of these belong to plants which are weeds of cultivation or 'colonists.'

The species of the British Flora may be divided into five principal Groups or Types. The first or Northern Type comprises species which are most abundant in the north and diminish southwards; the second or Common Type comprises species widely spread throughout Great Britain; the third or Southern Type comprises species which are most abundant towards the south and diminish northwards. The fourth or Eastern Type comprises species which are found mostly in the eastern counties and diminish westwards. The fifth or Western Type comprises species found mostly in the western counties but which diminish eastwards.<sup>1</sup> Now it is remarkable that about twelve per cent. of all the plants found in the deposits of the pliocene, pre-glacial, early glacial, inter-glacial, late glacial and neolithic periods belong to the Northern Type, about two-fifths of the whole to the Common Type, about one-third to the Southern Type, only about three to the Eastern Type, and none to the Western Type.

We now turn to the Flora of Hampshire as a component part of the British Flora. Climate and rainfall, geology, including surface as well as rock formations, and their effects on agriculture are treated of elsewhere in these volumes, but their effects on indigenous vegetation will not be so treated. It is the province of the botanist to point out these influences in all their bearings, but time and space forbid my giving more than a few prominent facts and suggestions for future observation and generalization.

Vegetation is influenced by the chemical constituents present or absent in the soil on which it grows, but perhaps more so by the geological character of the rock, whether or no it easily disintegrates, and whether or no its nature is absorbent. These influences more particularly affect Hampshire, as the rock is mostly near the surface and is not covered up by glacial drift and detritus, though gravels of different ages, often containing clay, frequently occur.

1. One of the principal features of the county lies in the large extent of open Chalk Downs, forming part of the Great Chalk range extending east and west across England, from Salisbury Plain to Dover. These in Hampshire form the high south walls of the great London basin and the north walls of the great Hampshire basin, in both of which lie the tertiaries. The highest land is chalk rock, and its elevation ranges from 800 to 972 feet above the sea level. The way in which the chalk has, on the Downs, been eroded and swept into smooth and swelling curves is most remarkable. On the Downs the soil is for the most part shallow, and the permeable nature of the chalk beneath has a most remarkable effect on the native vegetation, and has especially invited the presence of the xerophiles, of which the orchids

<sup>1</sup> Mr. H. C. Watson has treated this subject exhaustively in *Cybele Britannica* (Longmans, London).

## A HISTORY OF HAMPSHIRE

are noted members. Xerophiles are heat-loving plants and thrive on dysgeogenous soils which do not easily disintegrate and are non-absorbent and permeable. Hygrophiles are moisture-loving and thrive on eugeogenous absorbent soils which easily disintegrate and are impermeable. The terms xerophilous and dysgeogenous are not strictly parallel. The chalk is a typical xerophilous rock in England. Here is the home of the curious Green Man orchis (*Aceras anthropophora*), also of the Bee (*Ophrys apifera*), the Fly (*O. muscifera*), and the Spider orchis (*O. aranifera*), the fragrant Lady's Tresses (*Spiranthes autumnalis*), etc., and of another interesting member of the xerophiles, the small dwarf Silver sedge (*Carex humilis*).<sup>1</sup>

Another very remarkable characteristic of the higher chalk Down country, due to the permeable nature of the rock, is the frequent absence of streams; valley after valley large and small may be traced, but no rill or brook will be seen.

The greater rainfall which at a considerable distance inland extends over a large area, mostly in an easterly and westerly direction, waters the higher ground and nurtures its vegetation, while sinking into the porous chalk rock it is stored below to be poured out again in clear streams in the continuous and deeper valleys. The Bourne, one of those interesting intermittent springs, is alluded to in Notes on Botanical District II. Another effect arising from the nature of the chalk is the absence of bog and bog plants in the river valleys. It is I think certain that the Downs, at least the greater portion of them, were always open, and the vegetation has in consequence been little changed by the hand of man. The woods on the Downs which face the north-east are probably primeval and have their old and peculiar vegetation. These woods are often termed Hangers and their presence is probably due to the fact that the situation in which they are found is protected from the sun, and therefore favours the retention of moisture. We have primeval wood again where there is clay or gravel retaining moisture, affording shelter and humus to a forest-loving, shrubby and herbaceous vegetation. Harewood Forest, over 2,000 acres in extent, is an example of this kind, and contains principally oak and hazel; there is a sprinkling of birch, but the beech is mostly planted. Elm is prevalent on the low level gravels. The juniper is frequent on the Chalk downs, and also the yew.

2. Another feature of the county is its considerable extent of seaboard, as it includes that of the Isle of Wight. This circumstance increases the richness of the flora by the presence of a host of plants which are almost exclusively maritime. Let us visit the homes of several of these, and in addition to their peculiar interest we shall also enjoy some of the most beautiful and picturesque sea-coast scenery in

<sup>1</sup> Mr. Thurman names 50 typical xerophiles, of which the following are found in Hampshire: *Fagus sylvatica*, *Helleborus foetidus*, *Euphorbia amygdaloides*, *Melittis Melissophyllum*, *Daphne laureola*, *Teucrium chamædrys*, *Rosa rubiginosa*, *Mercurialis perennis*, *Carex humilis*, *C. montana*.



## BOTANY

England. On the south-west coast, between Bournemouth and Christchurch,<sup>1</sup> a botanist from the eastern or northern counties would be somewhat surprised to find the Lyme grass (*Elymus arenarius*) which occurs again only in three eastern counties and from Carnarvon northwards. Not far inland may here be seen a few patches (probably casuals or planted ?) of a lovely heath (*Erica vagans*), native in Cornwall ; it belongs to a small group of plants which have their home only in the south-west of England and in Andalusia, and theory has gone wild in the endeavour to fill the gap. The curious little Sedge (*Scirpus parvulus*) is, in England, found only here and on the Dorset coast. Here also we have one of the Sea-lavenders (*Statice auriculæfolia*).

We will now cross to the south coast of the Isle of Wight. On the Downs facing the sea at Freshwater is found in plenty that most curious and anomalous species the round-headed Centaury (*Erythræa capitata*). When botanising on this coast in 1879 I first saw this plant, and on careful examination was immediately struck by its having nearly free filaments, so deeply at the bottom of the corolla-tube were they inserted. My first idea was that I had picked an abnormal specimen, but no, all the plants I examined were similar. This character had hitherto escaped the observation of botanists, but it is so unique in the Genus and in the Natural Order Gentianaceæ that Endlicher's description of the latter, in his *Genera Plantarum*, excluded this Centaury and required revision to include it. Not twenty years before this the plant existed only in the dried state in the Royal Herbarium at Berlin, but from whence it came nobody knows ; it was gathered by a nurseryman who apparently did not signify its locality. It has since been detected in Sussex, Dorsetshire, Cornwall, Northumberland, and also on the coast of France and in Scandinavia. On these maritime Downs many plants assume such dwarf dimensions that a Swedish botanist has thought to give distinguishing varietal names to about half a dozen species, so strange did the plants appear to him. Among these are the following : *Pimpinella saxifraga*, *Scabiosa Columbaria*, *Carlina vulgaris*, *Campanula rotundifolia*. I had myself remarked these stunted but apparently quite healthy forms in 1879, and my opinion was that removed from the special influences which surround them, viz., an open position exposed to Atlantic storms, shallow soil and the porous nature of the chalk, they would immediately revert to their normal forms. The same botanist, Mr. Thorild Wulff, Junior, remarks that there is a striking correspondence between the vegetation of these Downs and that of the island of Oeland in Sweden, where the formation is also calcareous, the soil shallow, the climate similar, and where dwarf forms are frequent and many species are common to both islands.

On the heights of the chalk sea cliffs between Freshwater and the Needles of the Isle of Wight, as well as on the rocks of the picturesque cove of Steephill, grows the purple sweet-scented Stock

<sup>1</sup> Allusion to some maritime plants of the south-east coast of the county will be found on another page.

## A HISTORY OF HAMPSHIRE

(*Matthiola maritima*) the parent of all our favourite garden Stocks, annual and perennial. On the seashore the golden petals of the horned Sea poppy (*Glaucium luteum*), its colour heightened by the soft grey green of the foliage, brightens the beach. Near at hand the fern hunter might detect the rare Sea spleenwort (*Asplenium marinum*). It is worth looking for as the inroad of the sea has, it is to be feared, destroyed one spot on which it was known to grow. On the seashore again near Calshot on the mainland, as well as in other localities, the Seakale (*Crambe maritima*) flourishes. It was 200 years ago that the wild plant was first gathered and cooked, and found to be a palatable vegetable, while in these days few gardens are without it.

3. From the sea-board of the Isle of Wight we now turn to consider its inland character. Its prominent feature is the great and elevated anticlinal chalk ridge running east and west from one end of the island to the other, the chalk with the over and underlying strata being nearly perpendicular, as is well seen in the rocks of the Needles. The north slopes formed a portion of the catchment basin of the once great and ancient river Solent of which the rivers Avon and Stour were tributaries on the south side. The north side of the Island is wholly occupied by tertiaries with a large extent of eugeogenous soil favourable to hygrophiles. Copses are numerous, and nearly all of them, as well as Parkhurst Forest, abound in the narrow-leaved Lungwort, much prized in our gardens as it flowers in early spring and bears a profusion of purple flowers. On the south side of the Island we have below the chalk and throughout a considerable stretch of country the cliffs of the greensand and a deep soil beneath formed by the constant wearing away of the cliffs; thus is formed one of the most protected and warmest spots on the English coast, and the flora here is very rich. The Island possesses about twenty species not found on the mainland, while about one hundred and fifty are absent from the Island but found on the mainland. Other characteristics of the Flora of the Island will be found under 'Notes on Botanical Districts,' IV. and V.

But now we must bid farewell to the Isle of Wight, and on our way to the New Forest, the next prominent feature of the county we shall notice, we may land at Hythe and there observe the extensive mudflats covered by a fine, tall, waving grass, representing two forms not known outside of Great Britain (*Spartina alterniflora* and *Spartina Townsendi*). The most nearly allied species are found in America. These interesting grasses have lately been discovered on other parts of the coast, the latter at Chichester Harbour. They are used for thatching, and are locally called Sage!

4. In the New Forest, which may be said to be primeval, we shall find a vast extent of varied soil and aspect. It is covered in many parts with magnificent oak and other timber, the former being in past years of almost untold value in the building of our war-ships. The glades of the Forest are the only home in England of the Gladiolus (*Gladiolus illyricus*), the allied species of which are so highly prized as enriching



## BOTANY

our gardens in autumn. The Forest is well watered, and the nature of the soil being favourable to the formation of peat it maintains many remarkable species, among which I would first notice the large Long-leaved sundew (*Drosera anglica*). This remarkable flesh-feeder, very rare in the south and only lately re-discovered, is beautifully figured from Hampshire specimens in Curtis's *Fl. Londinensis*. Only of late years has it been proved by experiment that the sundews, of which we have three species in England, all native to the Forest, really feed upon and are nourished by the absorption of animal matter derived from the insects which are caught and held fast by the glandular sticky hairs with which the leaves are furnished. The younger Darwin found that, deprived of this flesh-nourishment, the plants produced fewer and less perfect seeds. *Isnardia* (*Ludwigia*) *palustris* is another plant deserving of special notice ; it is now found nowhere in Great Britain but in the New Forest, but it has a cosmopolitan distribution as it is native in the four quarters of the globe. Mr. Bolton King has the merit of re-discovering this plant, which had not been found for many years ; it seems to have completely disappeared in the neighbourhood of Petersfield and in the one spot in which it grew in Sussex, the only other British localities for this species. An elegant cotton grass (*Eriophorum gracile*) has lately been re-discovered in the Forest, also by Mr. Bolton King, but there is no chance of its being lost as it is abundant over a wide tract. The rare summer Lady's Tresses (*Spiranthes æstivalis*) is another interesting New Forest species, found only here and in Wyre Forest in Worcestershire. The Wood-bitter vetch (*Vicia Orobus*) deserves our especial notice ; the presence of this northern species tends to support the claim of three other northern species having once been, if not now, native in the county ; these are *Listera cordata* reported from the neighbourhood of Bournemouth, *Circea alpina* from that of Petersfield, and possibly *Goodyera repens* from the same neighbourhood. Of the last named species Johnson states that 'It grows plentifully in Hampshire within a mile of a market Towne called Petersfield towards Beryton. . . .' The northern moss (*Bryum alpinum*) is also found in the Forest and is another remnant of an arctic flora which once prevailed. Space will not admit of noticing more than one other New Forest plant, namely the Wild pink (*Dianthus plumarius*) the origin of some of our treasured garden pinks. It cannot be said to be native, but it is well established on the walls of Beaulieu Abbey. Before leaving the Forest I would notice two remarkable absences, that of the Cranberry (*Vaccinium Oxycoccus*) and the Sweet woodruff (*Asperula odorata*) ; everything would seem to invite the presence of these species but they are not here. In Hampshire the former is found only in the Isle of Wight, and in the Forests of Droxford and Woolmer in the Eastern Districts.

5. The southern portion of the county is also occupied by the tertiaries of the Hampshire basin, such as the London clay being largely developed. Here we have an extensive seaboard running from Redbridge to Hayling Island with many interesting maritime plants.

## A HISTORY OF HAMPSHIRE

The mud flats and banks on the Hamble and at the mouth of Titchfield river are covered by the grass which we saw at Hythe, *Spartina alterniflora*. In the neighbourhood of Portsmouth, Southsea and Gosport, I have trustworthy evidence that fifty years ago and probably later, the following interesting species were to be found : *Juncus acutus*, *Gnaphalium luteo-album*, *Rumex maritimus*, *R. palustris*, *Alopecurus fulvus*, but I cannot hear that they have been seen of late years. This neighbourhood was a rich field for the botanist until the introduction of drainage made the land valuable for building sites. The two first-named have lately been found in Hayling Island. On Shirril Heath, near Shedfield, the lily of the valley abounds in one of the woods. At Shedfield, and between it and Wickham, the lent lily grows in profusion ; the Royal fern (*Osmunda regalis*) occurs here and in every district ; but I must leave these parts and pass onwards to the north-eastern portion of the county.

6. In the neighbourhood of Petersfield the lower greensand, gault and upper greensand again crop up, and we have a repetition of the geology of the southern half of the Isle of Wight, but how poor the flora is in comparison with that on the same strata in the Island may be seen by comparing the list of plants in the Botanical District V. with that in District IX. In Sherard's herbarium at Oxford there is a specimen labelled as follows : '*Circæa minima* Col. gathered at Nested in shady rocky lanes a mile from Petersfield south.' It is an undoubted specimen of *Circæa alpina*, already alluded to. Had this northern inhabitant once a home here ? There is no record elsewhere of its having been found further south than Carnarvonshire and Yorkshire. I searched carefully for it all about Nursted, but unsuccessfully. The Willowherb (*Epilobium lanceolatum*) has been found in this neighbourhood by Mr. J. G. Baker ; it has not been detected elsewhere in the county. *Isnardia palustris*, which we noticed in the New Forest, formerly grew on the low ground in this neighbourhood, but drainage has destroyed it ; I have hunted long for this also but in vain. To the west and south of the greensand there are high chalk Downs, and the usual chalk vegetation.

7. Lastly we pass to the eastern and north-eastern part of the county, which lies in the Thames basin, and in which Alton, Basingstoke, Aldershot, Silchester and Highclere are situate. To the south-west there is chalk, but a larger portion of the country is occupied by the eocene tertiaries of the London basin, and we have in a measure a repetition of the New Forest and therefore of a vegetation of a similar character ; but the upper beds of the north of the Isle of Wight and the New Forest are absent. Two large and ancient Royal Forests, Woolmer Forest and Alice Holt, occupy the country about Selborne. There is a large extent of heath in the eastern portion of District XI., London clay occupies the western portion of the same District and the greater part of District XII. A considerable acreage of Frensham Pond lies within the Hampshire border, so we can claim the rare small Octandrous waterwort (*Elatine Hydropiper*) as native in Hampshire ; the Hexandrous





## LIST OF BOTANICAL DISTRICTS AND SUB-DISTRICTS

Rivers and Streams flowing into the Channel

- I. Trent and Stour.  
 II. Avon.  
 III. West Solent or New Forest.

- IV. South Solent or North Wight.  
 V. South Wight.  
 VI. Test.

- VII. Itchen.  
 VIII. East Solent.  
 IX. Arun.

Tributaries of the Thames

- X. Wey  
 XI. Lodden  
 XII. Kennel.

The Figures denoting the Sub-Districts are placed within circles thus:— (2)





## BOTANY

waterwort (*E. hexandra*) is also found here. For other plants of these Districts I refer to 'Notes on the Botanical Districts.'

8. We will now compare our flora with those of the neighbouring Counties of Wiltshire, Dorsetshire, Berkshire, Surrey and Sussex. Out of the 1,958 species inhabiting Britain, the County of Hampshire contains approximately 1,148 species, including the Ferns, Club Mosses, Pillworts, Horsetails and Charas. It is probably richer in species than any other county, though Kent may rival it. From its southern position it possesses a large proportion of those of the Southern Type; from its central and southern position it possesses many of the Eastern Type which reach Hampshire but gradually die out in the western counties, and similarly many of the Western Type which reach Hampshire but gradually die out in the eastern counties. Species of the Eastern Type probably owe their survival to their xerophilous or heat-loving nature, while those of the Western Type owe it to their hygrophilous or moisture-loving nature. Species of the Northern Type are naturally less numerous.

In the present volume space would not admit of giving comparative tables showing the differences between the Flora of Hampshire, and of the adjacent counties just named. The difference may in a measure be understood by the fact that, taking the total Flora of Hampshire at 1,148 species, about 190 of these are absent in Wiltshire—59 are absent in Dorsetshire—76 are absent in Sussex—113 are absent in Surrey and 148 are absent in Berkshire. On the other hand about 25 species found in Wiltshire are absent in Hampshire—42 found in Dorsetshire are absent in Hampshire—53 found in Sussex are absent in Hampshire—53 found in Surrey are absent in Hampshire—32 found in Berkshire are absent in Hampshire. That Hampshire has so many species which are absent in Wiltshire, Surrey and Berkshire arises mostly from the absence of seaboard in these counties, and consequently of maritime species.<sup>1</sup>

9. The following List gives the Natural Orders of the Flowering plants and Ferns represented in the county, together with the number of Genera and Species. The third column gives the number of plants which have been reported but for various reasons cannot be admitted as native or even as legitimate denizens or colonists.

<sup>1</sup> In the above enumerations *Rubi* are not included.

NOTE.—The arrangement and nomenclature followed in the lists here given is that of the 7th edition of the *London Catalogue*, the writer of which there explains that without being precisely similar the general arrangement and nomenclature was made to correspond closely with *English Botany*, 3rd edition, by Dr. Boswell Syme. In this work and in Sir Joseph Hooker's *Students' Flora* sub-species as understood by both these eminent botanists are adopted, but species only are numbered. While it is convenient to number occurrences, the fact of a number being attached must not necessarily be taken here as raising an individual to the rank of a species; for it is evident that the number of species in my second column would be considerably reduced if they were numbered in accordance with the above two standard works.

# A HISTORY OF HAMPSHIRE

## SUMMARY OF ORDERS, NUMBER OF GENERA AND OF SPECIES IN EACH ORDER, ETC.

### *Hampshire Flora.*

	Total Genera in each Order.	Total number Species in each Order.	Ex- cluded Species in each Order.		Total Genera in each Order.	Total number Species in each Order.	Ex- cluded Species in each Order.
CLASS I.							
DICOTYLEDONES OR							
EXOGENÆ.							
Div. I. <i>Thalamifloræ.</i>							
1. Ranunculaceæ . . .	10	33	4	40. Rubiaceæ . . .	4	13	5
2. Berberidaceæ . . .	1	1	—	41. Valerianaceæ . . .	3	7	3
3. Nymphæaceæ . . .	2	2	—	42. Dipsaceæ . . .	2	5	—
4. Papaveraceæ . . .	3	7	3	43. Compositæ . . .	41	91	14
5. Fumariaceæ . . .	2	8	2	44. Campanulaceæ . . .	5	9	3
6. Cruciferae . . .	24	47	10	45. Ericaceæ . . .	5	7	4
7. Resedaceæ . . .	1	2	1	46. Jasminaceæ . . .	2	2	—
8. Cistaceæ . . .	1	1	—	47. Apocynaceæ . . .	1	1	1
9. Violaceæ . . .	1	9	—	48. Gentianaceæ . . .	5	10	3
10. Droseraceæ . . .	1	3	—	49. Convolvulaceæ . . .	2	6	—
11. Polygalaceæ . . .	1	3	—	50. Solanaceæ . . .	3	4	5
12. Frankeniaceæ . . .	1	1	—	51. Scrophulariaceæ . . .	12	38	8
13. Caryophyllæ . . .	13	42	6	52. Orobanchaceæ . . .	2	8	2
14. Paronychiaceæ . . .	2	3	—	53. Verbenaceæ . . .	1	1	—
15. Portulacæ . . .	1	1	1	54. Labiatae . . .	18	43	12
<i>Tamariscaceæ</i> . . .	—	—	1	55. Boraginaceæ . . .	8	15	5
16. Elatinaceæ . . .	1	1	—	56. Lentibulariaceæ . . .	2	6	1
17. Hypericaceæ . . .	1	9	1	57. Primulaceæ . . .	7	11	—
18. Malvaceæ . . .	3	5	—	58. Plumbaginaceæ . . .	2	4	—
19. Tiliaceæ . . .	1	2	—	59. Plantaginaceæ . . .	2	6	1
20. Linaceæ . . .	2	3	2	Div. IV. <i>Mono-</i>			
21. Geraniaceæ . . .	3	13	7	<i>chlamydeæ.</i>			
22. Illicineæ . . .	1	1	—	<i>Amaranthaceæ</i> . . .	—	—	2
Div. II. <i>Calycifloræ.</i>				60. Chenopodiaceæ . . .	7	23	2
23. Celastraceæ . . .	1	1	—	61. Polygonaceæ . . .	2	24	3
24. Rhamnaceæ . . .	1	2	—	62. Thymeleaceæ . . .	1	2	—
25. Aceraceæ . . .	1	2	—	63. Santalaceæ . . .	1	1	—
26. Leguminosæ . . .	17	59	15	<i>Asaraceæ</i> . . .	—	—	2
27. Rosaceæ . . .	14	95	4	64. Euphorbiaceæ . . .	2	10	3
28. Lythraceæ . . .	2	2	1	65. Ceratophyllaceæ . . .	1	1	—
29. Onagraceæ . . .	3	11	3	66. Urticaceæ . . .	4	6	1
30. Haloragiaceæ . . .	3	8	1	67. Amentiferæ . . .	10	27	—
31. Cucurbitaceæ . . .	1	1	—	Div. V. <i>Gymnospermæ.</i>			
32. Grossulariaceæ . . .	1	3	—	68. Coniferæ . . .	3	3	1
33. Crassulaceæ . . .	3	8	2	CLASS II.			
34. Saxifragaceæ . . .	3	5	—	MONOCOTYLEDONES OR			
35. Umbelliferæ . . .	27	39	14	ENDOGENÆ.			
36. Araliaceæ . . .	1	1	—	Div. I. <i>Petalioideæ.</i>			
37. Cornaceæ . . .	1	1	—	69. Typhaceæ . . .	2	6	—
Div. III. <i>Corollifloræ.</i>				70. Araceæ . . .	2	3	1
38. Loranthaceæ . . .	1	1	—	71. Lemnaceæ . . .	1	4	1
39. Caprifoliaceæ . . .	4	6	3	72. Naiadaceæ . . .	4	18	1
				73. Alismaceæ . . .	5	7	—



# BOTANY

	Total Genera in each Order.	Total number Species in each Order.	Ex- cluded Species in each Order.		Total Genera in each Order.	Total number Species in each Order.	Ex- cluded Species in each Order.
74. Hydrocharidaceæ .	2	2	—	CLASS III.			
75. Orchidaceæ . . .	12	29	4	ACOTYLEDONES OR			
76. Iridaceæ . . . .	2	3	2	CRYPTOGAMEÆ.			
77. Amaryllidaceæ . .	2	3	3	Div. I. <i>Vasculares.</i>			
78. Dioscoreaceæ . . .	1	1	—	84. Filices . . . . .	12	21	5
79. Trilliaceæ . . . .	1	1	—	85. Lycopodiaceæ . .	1	3	1
80. Liliaceæ . . . . .	12	17	6	86. Marsiliaceæ . . .	1	1	—
81. Juncaceæ . . . . .	2	19	—	87. Equisetaceæ . . .	1	5	—
Div. II. <i>Glumiferae.</i>				Div. II. <i>Cellulares.</i>			
82. Cyperaceæ . . . .	8	72	2	88. Characeæ . . . . .	4	11	—
83. Gramineæ . . . . .	37	106	5	Total. . . . .	430	1148	188

10. The Districts into which I have mapped out the county for botanical purposes are natural ones and are the same as those given in my *Flora of Hampshire*. They are founded on the twelve principal river basins. The districts are :—

- I. The Trent and Stour.
- II. The Avon.
- III. The West Solent, or New Forest.
- IV. The South Solent or North Wight.
- V. The South Wight.
- VI. The Test.
- VII. The Itchen.
- VIII. The East Solent.
- IX. The Arun ;
- X. The Wey.
- XI. The Lodden.
- XII. The Kennet ;

these all flow into the Channel.

these are tributaries of the Thames. In the following 'Notes on the Botanical Districts' I have given lists of the rarer plants found in them, the whole being brought up to date.

11. As regards the Cryptogamia or flowerless plants I have been able to obtain the assistance of botanists who have severally made some natural Orders of these plants their especial study. Mr. H. N. Dixon, F.L.S., has undertaken the Musci and Hepaticæ ; Mr. W. H. Wilkinson, F.L.S., the Lichens ; Mr. E. M. Holmes, F.L.S., the Algæ ; the Rev. W. L. W. Eyre contributes a paper on some of the more conspicuous and interesting Fungi. The county would appear to present a wide field for research in this Order, and Mr. Saunders has found the New Forest to be a good hunting ground for the Mycetozoa. The Rev. W. Moyle Rogers is *facile princeps* in his knowledge of the English wild Roses and Brambles, and as the study of these is especially fascinating to many botanists I am glad to be able to include in my article some notes from his pen.

# A HISTORY OF HAMPSHIRE

## NOTES ON THE BOTANICAL DISTRICTS, WITH LISTS OF THE RARER PLANTS IN EACH DISTRICT<sup>1</sup>

### DISTRICT I.—THE TRENT AND STOUR

THIS district consists of portions of two catchment basins. The smaller portion, bounded by a line running from a point between Boscombe and Hengistbury over Little Down and Wallis Down and including the immediate neighbourhood of Bournemouth, is part of the basin of the Trent or Piddle. To the north and west of this we have the basin of the Stour, the boundary of which, to the west, runs nearly in a northerly direction from Christchurch over Hern Common, Ashley heath, and Sommerley heath, where it crosses the Hants boundary and enters Dorsetshire. The greater portion of this district is low ground, and is poor and sandy, forming large tracts of sandy and boggy heath. There is some alluvium along the courses of the river Stour. The district is marked by an absence of xerophilous species.

The coast sand hills or cliffs east of Boscombe are remarkable; they form a kind of undulating plateau, the higher portions of which are usually higher than the table-land inland, the breadth varying from 30 to 100 yards. The vegetation, from the unstable character of the sand—much of which is doubtless blown up from the shore—is very meagre, and consists of few species, *Ammophila arundinacea* being the principal one, its rhizomes lying deep in the sand, and where the cliff has newly fallen these are exposed, showing the lowest depth to which they grow to be about three feet; below this depth all the rhizomes are dead. *Aira præcox*, *Calluna vulgaris*, *Jasione montana* var. *littoralis*, *Fries*, *Viola canina*, *Ulex Gallii* and *nanus*, *Pinus maritima*, and a few mosses, constitute the principal herbage.

*Simethis bicolor* is found in Dorsetshire only, just over the borders of this district. The rarer plants are—

#### CRUCIFERÆ.

*Brassica Rapa* v. *Briggsii* H. C. Watson  
[*Camelina sativa* Crantz].

#### PARONYCHIEÆ.

*Herniaria hirsuta* L.

#### LEGUMINOSÆ.

*Trifolium suffocatum* L.  
*Lotus hispidus* Desf.

#### ROSACEÆ.

*Rubus nemoralis* P. J. Muell.  
*R. radula* v. *anglicanus* Rogers  
*R. integribasis* P. J. Muell.

#### UMBELLIFERÆ.

*Sium latifolium* L.

#### CAMPANULACEÆ.

*Jasione montana* v. *littoralis* Fries

#### GENTIANEÆ.

*Cicendia filiformis* Delarb.

#### SCROPHULARINEÆ.

*Veronica arvensis* v. *eximia* Towns.

#### CHENOPODIACEÆ.

*Chenopodium ficifolium* Sm. casual.

#### POLYGONACEÆ.

*Polygonum aviculare* v. *littorale* Link  
*P. Raii* Bab.

#### ALISMACEÆ.

*Alisma Plantago* v. *lanceolatum* Afz.

#### EUPHORBIACEÆ.

*Euphorbia Paralias* L.

#### ORCHIDEÆ.

*Orchis incarnata* L. flesh coloured var.  
*Listera cordata* R. Br.

#### CYPERACEÆ.

*Rhynchospora fusca* Roem. & Schult.

#### GRAMINEÆ.

*Avena strigosa* Schreb.  
*Elymus arenarius* L.

<sup>1</sup> Plants found only in one District are printed in italics. Small figures, in brackets, denote the sub-districts in which the plants occur. A rectangular bracket denotes, naturalized or probably not wild. An asterisk before the specific name denotes that the species is or may be extinct. Habitats and localities for all the species are given at length in my 'Flora of Hampshire' and for this reason I have, in these lists, adhered to the nomenclature of genera and species adopted in that work, but as regards the Natural Orders I have here followed Bentham and Hooker in their *Genera Plantarum*. The number of Orders remains the same—98, as given in my Summary. I have, with intention, given prominence to varieties, as by comparing the lists of the earlier Districts with those of the later ones the scarcity of varieties as well as of species, in the latter, will be noticed. The difference arises I believe from two causes, viz., that the earlier Districts have not only been better worked, but the flora is really richer.



# BOTANY

## DISTRICT II.—THE AVON

THIS district is formed by the lower portion of the catchment basin of the Avon. A tributary of the Avon runs by Shipton and to the west of Quarley hill, forming an outlying portion of the district.

The Bourne, which rises near Collingbourne, in Wilts, runs by South Tidworth and Shipton, soon after again entering Wilts and finally joining the Avon below Salisbury, a course of about twenty-three miles, is one of those interesting intermittent streams, not unfrequent in chalk countries, of which the stream at Calbourne in the Isle of Wight is another example. The Bourne rises and flows between November and February, and continues to flow till May, never later, and sometimes ceasing earlier. In very dry seasons it never runs at all, and its bed is sometimes dry for two or three years together; it was quite dry in the summer of 1874.

The character of a considerable area of the district is similar to that of the New Forest, and affords a large number of the same bog plants. The waters of the Stour and Avon join at Christchurch and form a brackish water lake, around which there is favourable ground for the growth of maritime species, both *psammophilous* and *pelophilous*. Among the former we have in this District one of Hampshire's greatest rarities—*Polygonum maritimum*, among the latter we have another rarity—*Scirpus parvulus*. The water-parting separating the Avon and the Stour is not easy to define, but the Avon and New Forest watersheds are defined by a range of low hills (on one of which Burley is situated), which here stretch in an undulating line nearly due north and south. The absence of *Silva* throughout the alluvial portion of this district is remarkable, but it may possibly have been overlooked; it occurs at Shipton. Breamore wood is extensive and has some very fine beech, yews, larch, etc. *Scirpus Holoschoenus* is recorded by Sherard and other botanists as native in Hampshire, but without locality.

Among the rarer plants of the district are—

CRUCIFERÆ.	LABIATÆ.
<i>Raphanus maritimus</i> Sm.	<i>Mentha gentilis</i> L.
DROSERACEÆ.	PINGUICULACEÆ.
<i>Drosera anglica</i> Huds.	<i>Utricularia neglecta</i> Lehm.
CARYOPHYLLÆÆ.	PLUMBAGINÆÆ.
[ <i>Dianthus deltoides</i> L.]	<i>Statice auriculæfolia</i> v. <i>occidentalis</i> Lloyd
<i>Sagina maritima</i> v. <i>densa</i> Jord.	POLYGONACEÆ.
GERANIACEÆ.	<i>Polygonum maritimum</i> L.
<i>Erodium cicutarium</i> v. <i>triviale</i> Jord.	TYPHACEÆ.
LEGUMINOSÆ.	<i>Sparganium neglectum</i> , Beeby
<i>Trifolium suffocatum</i> L.	NAIADACEÆ.
<i>Lotus hispidus</i> Desf.	<i>Potamogeton flabellatus</i> Bab.
<i>Vicia lathyroides</i> L.	ALISMACEÆ.
ROSACEÆ.	<i>Actinocarpus Damasonium</i> Hook.
<i>Rubus fuscus</i> v. <i>nutans</i> Rogers	HYDROCHARIDÆÆ.
<i>R. Bellardi</i> W. & N.	<i>Hydrocharis morsus-ranæ</i> L.
<i>R. Balfourianus</i> Blox.	CYPERACEÆ.
CRASSULACEÆ.	<i>Cyperus fuscus</i> L.
<i>Sedum Telephium</i> v. <i>Fabaria</i> = <i>S. Fabaria</i> Koch	<i>Scirpus parvulus</i> R. & S.
UMBELLIFERÆ.	<i>Carex limosa</i> , L.
<i>Sium latifolium</i> L.	<i>C. humilis</i> Leysser
<i>Daucus Carota</i> v. <i>maritimus</i> Le Gall? non With.	GRAMINÆÆ.
COMPOSITÆ.	<i>Leersia oryzoides</i> Soland.
<i>Diotis maritima</i> Cas.	<i>Digitaria humifusa</i> Pers.
CAMPANULACEÆ.	<i>Elymus arenarius</i> L.
<i>Campanula Rapunculus</i> L.	LYCOPODIACEÆ.
ERICACEÆ.	<i>Lycopodium Selago</i> L.
[ <i>Erica vagans</i> L.]	
GENTIANÆÆ.	
<i>Erythraea littoralis</i> Fr.	
<i>Cicendia filiformis</i> Delarb.	

# A HISTORY OF HAMPSHIRE

## DISTRICT III.—THE WEST SOLENT OR NEW FOREST

The New Forest, to the botanist, is very favourite ground. Only small portions are enclosed, and much of the unenclosed ground is eminently wild and picturesque, with large tracts of open heath and bog, also of woodland with a great variety of forest trees. Much of the enclosed portion is planted with larch and pine.

The Forest is watered by two principal streams. The Boldre or Lymington rises to the west, and the catchment basin of this stream comprises Sub-district (1). The Exe or Beaulieu rises to the east, and its catchment basin comprises Sub-district (2). The latter is tidal as far as Beaulieu village, a distance of about four miles from the coast ; its shores form good ground for littoral and estuary plants.

The Forest is the home of some of England's greatest rarities. The vegetation is eminently that of eugeogenous soil, but one distinctly xerophilous and rare species is found here and also in district VI.—*Carex montana*. Though there is littoral ground, there is no rocky shore. The following are the rarer plants of this DISTRICT—

- |   |   |
|---|---|
| RANUNCULACEÆ.   | LABIATÆ.  |
| <i>Ranunculus intermedius</i> Knaf (1) (2).                       | <i>Mentha pratensis</i> Sole (1) (2).                         |
| CRUCIFERÆ.  | CHENOPODIACEÆ.  |
| <i>Lepidium Draba</i> L. (1).                                     | <i>Salicornia herbacea</i> v. <i>procumbens</i> Moq. (1) (2). |
| VIOLARIÆ.   | POLYGONACEÆ   |
| <i>Viola stagnina</i> Kitaib. (1).                                | <i>Polygonum Raii</i> Bab. (1) (2).                           |
| DROSERACEÆ.   | TYPHACEÆ.   |
| <i>Drosera anglica</i> Huds. (1).                                 | <i>Sparganium minimum</i> Fr. (1) (2).                        |
| CARYOPHYLLÆ.  | NAIADACEÆ.  |
| <i>Dianthus plumarius</i> L. (2).                                 | <i>Potamogeton rufescens</i> Schrad. (1) (2).                 |
| MALVACEÆ.   | ALISMACEÆ   |
| <i>Lavatera arborea</i> L. (1).                                   | <i>Actinocarpus Damasonium</i> Hook. (1).                     |
| GERANIACEÆ.   | HYDROCHARIDÆÆ   |
| <i>Erodium moschatum</i> Herit. (1).                              | <i>Hydrocharis morsus-ranæ</i> L. (2).                        |
| LEGUMINOSÆ.   | ORCHIDÆÆ.   |
| <i>Vicia Orobus</i> DC. (1).                                      | <i>Spiranthes æstivalis</i> Rich. (1).                        |
| ROSACEÆ.  | IRIDÆÆ.   |
| <i>Rubus fissus</i> Lindl. (1).                                   | <i>Gladiolus illyricus</i> Koch (1).                          |
| <i>R. nitidus</i> W. & N. (1).                                    | LILIACEÆ.   |
| <i>R. integribasis</i> P. J. Muell. (1).                          | <i>Polygonatum officinale</i> All. (1).                       |
| <i>R. erythrinus</i> Genev. (1).                                  | CYPERACEÆ.  |
| <i>R. rhombifolius</i> Weihe (1).                                 | <i>Scirpus parvulus</i> R. & S. (1).                          |
| <i>R. macrophyllus</i> v. <i>amplificatus</i> Lees (1).           | <i>Eriophorum gracile</i> Koch (1) (2).                       |
| <i>R. pyramidalis</i> Kalt. (1) (2).                              | <i>Carex acuta</i> v. <i>prolixa</i> Fr. (2).                 |
| <i>R. lasiocladus</i> Focke v. <i>angustifolius</i> Rogers (1).   | <i>C. limosa</i> L. (1) (2).                                  |
| <i>R. anglosaxonicus</i> Gelert. (1).                             | <i>C. montana</i> L. (1) (2).                                 |
| <i>R. fuscus</i> W. & N. v. <i>nutans</i> Rogers (1).             | <i>C. punctata</i> Gaud. (1).                                 |
| <i>R. pallidus</i> W. & N. (non Bab.) (1).                        | <i>C. Oederi</i> Retz. (2).                                   |
| <i>R. adornatus</i> P. J. Muell. (1).                             | <i>C. filiformis</i> L. (1).                                  |
| <i>R. serpens</i> Weihe (1).                                      | GRAMINEÆ.   |
| <i>R. Balfourianus</i> Blox. (1).                                 | <i>Leersia oryzoides</i> Soland. (1).                         |
| ONAGRARIÆÆ.   | <i>Aira setacea</i> Huds. (1) (2).                            |
| <i>Isnardia palustris</i> L. (1) (2).                             | <i>Agrostis vulgaris</i> v. <i>nigra</i> , With. (1).         |
| UMBELLIFERÆ.  | <i>Glyceria declinata</i> Breb. (1).                          |
| <i>Oenanthe fluviatilis</i> Coleman (1).                          | FILICES.  |
| <i>Daucus Carota</i> v. <i>maritimus</i> Le Gall (non With.) (1). | <i>Phegopteris polypodioides</i> Fée. (1).                    |
| RUBIACEÆ.   | LYCOPODIACEÆ.   |
| <i>Rubia peregrina</i> L. (2).                                    | <i>Lycopodium Selago</i> L. (1) (2).                          |
| COMPOSITÆ.  | CHARACEÆ.   |
| <i>Inula crithmoides</i> L. (1).                                  | <i>Chara fragilis</i> v. <i>capillacea</i> Coss. & Germ. (2). |
| GENTIANÆÆ.  | <i>C. fragilis</i> v. <i>delicatula</i> Braun (2).            |
| <i>Cicendia filiformis</i> Delarb. (1) (2).                       | <i>C. hispida</i> L. (1).                                     |
| SCROPHULARINÆÆ.   | <i>Nitella translucens</i> Agardh (1) (2).                    |
| <i>Limosella aquatica</i> L. (1).                                 | <i>N. flexilis</i> Agardh (2).                                |
| <i>Melampyrum arvense</i> L. (1).                                 | <i>N. opaca</i> Agardh (1) (2).                               |
|   | <i>N. opaca</i> v. <i>attenuata</i> H. & J. Groves (2).       |



# BOTANY

## DISTRICT IV.—THE SOUTH SOLENT OR NORTH WIGHT

SUB-DISTRICT (1). This, though small in extent, is rich in interesting plants. It comprises considerable variety of ground—high Downs,<sup>1</sup> cliffs, peat, salt marsh, sandy soil, etc. The principal stream is the Yar, one of the tributaries of which rises at Freshwater gate, close to the coast. The Yar becomes tidal at Freshwater mill.

On the Downs between Freshwater and the Needles numerous plants grow only, or principally, from within about ten to twenty yards of the edge of the cliff, among these may be named—

*Marrubium vulgare*, *Geranium molle*, *Senecio vulgaris*, *Malva sylvestris*, *Arenaria leptoclados*, *Torilis nodosa*, *Helianthemum vulgare*, *Medicago lupulina*, *Carduus tenuiflorus*, *Sedum anglicum*, etc.

SUB-DISTRICT (2). This comprises a considerable amount of chalk Downs, partly well wooded; the larger portion consists of Upper Eocene clays extending to the coast.

In the wooded valley running up to Rowledge grows *Calamintha sylvatica*. Westover plantations are situated on the higher ridge of the Downs which slopes to the north. At Calbourne is a beautifully clear stream which rises in the village; it is intermittent and had quite lately (Sept. 3, 1879) broken out, even in the road in several places. At this time of the year its volume is usually much smaller, being largest in February, the month in which it usually commences to flow abundantly. There are extensive salt marshes about Newtown, and the influence of the tide extends to Shalfleet. The northern and western portions of Parkhurst Forest lie in this sub-district.

On the sandy and gravelly beach just above high water at the mouth of the little valley which is bounded on the east by Burnt Wood, *Euphorbia Paralias* grows in plenty. The ground suitable for it extends about 200 yards in length, and is more or less occupied by the plant. I could not find a trace of *Euphorbia Paralias* in Gurnard bay. *Agropyrum pungens* and *acutum* occur in this bay.

The salterns around Newtown and Shalfleet have been disused for some years, the high price of coal rendering the boiling process too expensive. Some of the plants which formerly grew on the margins or even in the brine itself have all but disappeared. Such was the case with *Chara alopecuroides* until recently re-found, in sparing quantity. *Inula crithmoides* seems to have all but disappeared, except on the mud flats. Dr. Bromfield says it used to fringe the borders of the salt pans. *Frankenia lævis* still flourishes here. *Silaus pratensis* abounds on the clay land in this sub-district. *Pinguicula lusitanica* occurs near Cockleton.

SUB-DISTRICT (3). This sub-district is drained by the Medina, which flows from south to north through the centre of the island, and separates the two districts East and West Medina into which Dr. Bromfield divides the whole island. The Medina cuts through the chalk hills at Newport, which extend to the high land on which Hoy's monument stands on the northern extremity of St. Catherine's Down. This river must be the remains of a very ancient one. The southern part of the sub-district is sandy (Lower Green Sand), and the central portion of the valley is flat and boggy. The bog has lately been more deeply drained, to the destruction of many bog plants, whose absolute extinction is to be apprehended; here occur—

*Osmunda regalis*, *Lastrea Thelypteris*, *Vaccinium Oxycoccus*, *Carex teretiuscula*, *C. flava* v. *minor*, *C. curta*, *C. ampullacea*, *Scirpus fluitans*, *Myrica Gale*, etc.

*Aconitum Napellus* is naturalised on the banks of the Medina outside of Newport. Lashmere pond apparently drains into district V., but the ground to the N. which slopes towards the W., though artificially drained into this pond, would naturally drain into the Medina. On Bleak Down *Viola canina* and *Ulex Gallii* grow. On the sloping ground just above the Wilderness on the E. side *Botrychium Lunaria* occurs, not at Rookley as stated in Fl. Vect.

Within the walls of Carisbrooke castle about 230 distinct species of wild plants occur. *Pyrus scandica* and *semipinnata* should possibly not be reckoned among these. Extensive chalk Downs rise to the S.W. of Newport, on which there is not much wood except on Westridge Down. Between Newport and Cowes are numerous creeks connected with the Medina, which with it are influenced by the tides; *Inula crithmoides* is found here. *Bupleurum tenuissimum* occurs near Medham, *Erythræa pulchella tenuiflora* a little further south. There are no sandy beaches in this sub-district. The vicinity of E. and W. Cowes has rendered

<sup>1</sup> The term Downs should perhaps be limited to the smooth and undulating chalk where the pasture is unbroken, but I also include in the term those parts which have been brought into cultivation, and the presence of wood generally indicates that of marl, or of clays and gravel.

## A HISTORY OF HAMPSHIRE

every bit of land so valuable that the beach is here turned into gravel walks and grass plots, or the sea is kept back by sea walls.

SUB-DISTRICT (4). This takes in the N.E. portion of the island ; it is bounded on the south by the line of Downs extending from St. George's Down to Brading nearly. The principal streams which drain it are—1st, that rising near Stapler's heath which enters the sea at King's quay ; 2ndly, that rising under Mersley Down and entering the sea at Wootton creek ; 3rdly, a small stream rising at East Ashey which passes through Ryde, and formerly through what was called the Dover, now entirely built upon, or occupied by new roads and promenades, and the sea kept back by a high sea wall which extends to Sea View. The country is well wooded, the soil is principally stiff clay. One of the most frequent plants is *Helminthia echinoides*. The shores of Wootton creek formerly afforded *Thalictrum flavum*, which has not been found there for many years. Along the shore to the west of Ryde the seaside *Chenopodia* abound, so do *Triticum pungens* and *acutum*. The copses about Quarr and Wootton come down close to the edge of the water, which here actually washes the roots of the trees. *Rubia peregrina*, *Asperula odorata*, *Populus tremula*, and *Epipactis media*, grow here in profusion. *Fumaria confusa* occurs on the gravelly beach and a profusion of *Sinapis nigra*. *Sclerochloa Borreri*, *S. procumbens*, *S. distans*, *Alopecurus bulbosus*, etc., occur under walls and in the marshes behind the town of Ryde. I suspect that King's quay may afford better botanising ground than Wootton.

The following are the rarer plants in North Wight—

### CRUCIFERÆ.

*Raphanus maritimus* Sm. (1).  
*Matthiola incana* R. Br. (1).

### CARYOPHYLLÆ.

*Dianthus* \* *prolifer* L. (4).  
*Silene gallica* v. *eugallica* Syme (1) (4).  
*Stellaria umbrosa* Opiz (3).  
*Cerastium pumilum* Curt. (1).  
*Spergularia neglecta* v. *media* Syme (3).

### FRANKENIACEÆ.

*Frankenia laevis* L. (1) (2).

### GERANIACEÆ.

*Erodium maritimum* Sm. (1).

### LEGUMINOSÆ.

*Trifolium maritimum* Huds. (1) (2).  
*Lotus corniculatus* v. *villosus* (1) (2) (4).  
*Lathyrus* \* *maritimus* Bigel. (4).  
*L. palustris* L. (1)

### ROSACEÆ.

[*Prunus Padus* L. (4).]  
*Rosa mollissima* Willd. (3) (4).  
*Pyrus scandica* Syme (3),  
*P. semipinnata* Roth (3).  
*P. communis* v. *Achras* Gaertn. (2).  
*Rubus micans* Gren. & God. (1).  
*R. hemistemon* Muell. ? (3).

### ONAGRARIÆ.

[*Oenothera biennis* L. (3)]

### SAXIFRAGÆÆ.

*Ribes rubrum* v. *Smithianum* Syme (2).

### COMPOSITÆ.

*Anthemis Cotula* v. *maritima* Bromf. (1).  
*Diotis* \* (*maritima*) *candidissima* Desf. (1).  
*Inula Helenium* L. (1) (2) (3) (4).  
*Hieracium Pilosella* v. *pilosissimum* Fries (1).

### GENTIANÆÆ.

*Erythræa Centaurium* v. *capitata* Koch (1).  
*E. pulchella* v. *tenuiflora* Link sp. (3).  
*E. capitata* Willd. (1).  
*Gentiana Amarella* v. *præcox* Raf. (1).

### SCROPHULARINÆÆ.

*Linaria vulgaris* × *repens* Syme (3).  
*L. vulgaris* v. *latifolia* Bab. (4).  
*Veronica spicata* L. (3).  
*Euphrasia occidentalis* Wettst. (1).

### OROBANCHACEÆ.

*Orobanche Picridis* F. Schultz (1).

### LABIATÆ.

*Mentha arvensis* v. *agrestis* Sole (4).  
*Calamintha menthifolia* v. *ascendens* Jord. (3).  
*C. sylvatica* Bromf. (2).  
*Stachys palustris* v. *ambigua* Sm. = *S. sylvatica* × *palustris* Wirtg. (4).

### CHENOPODIACEÆ.

*Salicornia herbacea* v. *procumbens* Moq. (1) (2) (3).  
*Chenopodium glaucum* L. (1).  
*C. ficifolium* Sm (Isle of Wight, Kew Herb.) casual.

### POLYGONACEÆ.

*Polygonum Persicaria* v. *elatum* Gren. & Godr. (3).

### SALICINÆÆ.

*Salix Smithiana* v. *rugosa* Bab. = *S. ferruginea* v. *rugosa* Syme (3).  
*S. aurita* v. *minor* Syme (4).  
*S. laurina* Sm. (1).

### TYPHACEÆ.

*Sparganium* \* *minimum* Fries (2).

### NAIADACEÆ.

*Zanichellia palustris* v. *pedicellata* Fries sp.  
'plentiful in ditches near the coast' More

### IRIDEÆ.

*Iris foetidissima* v. *citrina* Bromf. (1).

### LILIACEÆ.

*Scilla* \* *verna* Huds. (3).

### CYPERACEÆ.

*Cyperus longus* L. (2) (3).



# BOTANY

## GRAMINEÆ.

- Spartina Townsendi* H. & J. Groves (1) (3).  
*Phleum arenarium* L. (1).  
*Polypogon monspeliensis* Desf. (1).  
*Phragmites communis* Trin. v. *nigricans* Gren. & God. (1).  
*P. communis* v. *repens* Mey. (2).  
*Festuca* \* *ciliata* Danth. v. *ambigua* Towns. = F. *ambigua* Le Gall. (4).  
*Bromus mollis* v. *Ferronii* Mabilie (1).

- Triticum pungens* v. *littorale* Syme (1) (4).  
*T. pungens* v. *pycnanthum* Syme (2).

## FILICES.

- Lastrea Filix-mas* v. *Borreri* Newm. (3) (4).

## CHARACEÆ.

- Chara fragilis* Desv. (1).  
*C. hispida* L. (1).  
*Lamprothamnus alopecuroides* Braun (2).

## DISTRICT V.—SOUTH WIGHT

SUB-DISTRICT (1). This comprises little variety of soil or situation ; to the north a considerable extent of high chalk Downs, from under which the greensand and stiff clays of the Weald crop out, the latter extending from Compton nearly to Atherfield, and dipping into the sea, which is encroaching deeply on this coast, washing away the constantly slipping land. There are no bays, only steep chines, the water from which sinks into the shingle before reaching the high-water mark. The Compton chalk cliffs are covered with *Matthiola incana* ; *Scirpus maritimus* is almost the only coast or brackish water plant I have noticed on this coast. The Downs afford *Gentiana campestris*, *Erythræa capitata*, *Campanula glomerata*, etc. There is boggy ground at Moortown and Shorwell. *Osmunda regalis* is said to grow at Moortown.

SUB-DISTRICT (2). This sub-district presents a greater variety of ground than any other in the island, and it also comprises a larger area. It is watered by the Yar, which rises at St. Catherine's Down and flows into Brading harbour. The Undercliff is excellent ground for the botanist, and it is highly picturesque. Niton, Steephill, Ventnor, Bonchurch, Apse castle woods and Apse heath, Sandown bay and level, Alverstone lynch, Yaverland, Brading, St. Helen's spit, Culver cliffs, etc., are all noted for rare plants. Among the rarer plants besides those already named are—

## FUMARIACEÆ.

- Fumaria pallidiflora* Jord. (1) (2).

## CRUCIFERÆ.

- Matthiola incana* R. Br. (1) (2).  
*Nasturtium officinale* v. *stifolium* Reich. (2).  
*Draba verna* v. *brachycarpa* Jord. sp. (2).

## CARYOPHYLLÆÆ.

- Silene nutans* L. (2).  
*Cerastium pumilum* Curt. (2).  
*C. triviale* v. *holosteooides* Fr. (2).  
*Arenaria serpyllifolia* v. *glutinosa* Koch (2).  
*Spergularia neglecta* v. *media* Syme (2).

## HYPERICINÆÆ.

- Hypericum montanum* L. (2).

## GERANIACEÆ.

- Geranium rotundifolium* L. (2).  
*Erodium cicutarium* v. *pilosum* Boreau (2).  
*E. maritimum* L'Herit. (1).

## LEGUMINOSÆ.

- Vicia sylvatica* L. (2).  
*Lathyrus maritimus* Bigel. (2).

## ROSACEÆ.

- Rosa Sabini* Woods (R. *spinosissima* × *tomentosa*) (2) ?  
*Rubus argentatus* P. J. Muell. (2).  
*R. hirtifolius* Muell. & Wirt. (2).  
*R. Borreri* Bell Salt. (2).  
*R. Salteri* Bab. (2).  
*R. Balfourianus* Blox. (2).

## CRASSULACEÆ.

- Sedum dasyphyllum* L. (2).

## UMBELLIFERÆ.

- Caucalis daucoides* L. casual ? (2).

## COMPOSITÆ.

- Inula Helenium* L. (2).  
*Leontodon autumnalis* v. *pratensis* Koch (2).  
*Crepis taraxacifolia* Thuill. (2).

## GENTIANÆÆ.

- Erythræa capitata* Willd. (1).  
*Gentiana Amarella* v. *præcox* Raf. (1) (2).

## SCROPHULARINÆÆ.

- Euphrasia occidentalis* Wettst. (2).  
*E. brevipila* Burn. & Grem. (2).  
*Melampyrum arvense* L. (2).

## OROBANCHACEÆ.

- Orobanche caerulea* Vill. (2).  
*O. Hederæ* Duby (1) (2).  
*O. amethystea* Thuill. (2).

## BORAGINÆÆ.

- Cynoglossum officinale* v. *subglabrum* Syme (2).

## PLUMBAGINÆÆ.

- Statice auriculæfolia* v. *occidentalis* Lloyd (1).

## CHENOPODIACEÆ.

- Salicornia radicans* v. *lignosa* Woods (2).  
*Chenopodium polyspermum* a *genuinum* = *C. cymosum* Cheval (2).  
*C. rubrum* v. *pseudobotryoides* Wats. (2).  
*C. glaucum* L. (2).

## POLYGONACEÆ.

- Polygonum Persicaria* v. *elatum* Gren. & God. (2).

## EUPHORBIACEÆ.

- Euphorbia* \* *Peplis* L. (2).

## URTICACEÆ.

- Urtica dioica* v. *angustifolia* A. Blytt (2).

# A HISTORY OF HAMPSHIRE

## SALICINÆ.

*Salix acuminata* Sm. (2).

## AROIDEÆ.

*Arum italicum* v. *neglectum* Towns. (2).

## NAIADACEÆ.

*Zanichellia palustris* v. *pedicellata* Fries sp.  
(I. of W. Ditches near the coast A. G.  
More)

## ORCHIDEÆ.

*Ophrys aranifera* Huds. (2).

## IRIDEÆ.

*Gladiolus illyricus* Koch. (2).  
*Iris foetidissima* v. *citrina* Blomf. (2).

## LILIACEÆ.

*Scilla autumnalis* L. (2).  
*S. verna* \* Huds. (2).

## CYPERACEÆ.

*Cyperus longus* L. (2).  
*Carex Boennighausiana* = *C. paniculata* × *remota* (2).  
*C. paludosa* v. *Kochiana* Gaud. (2).

## GRAMINEÆ.

*Phragmites communis* v. *repens* Gren. & God (2).  
*Poa bulbosa* L. (2).  
*Festuca uniglumis* Soland. (2).  
*F. ciliata* v. *ambigua* Towns. (2).  
*F. rubra* v. *acutifolia* Hackel (2).  
*Bromus mollis* v. *Ferronii* Mabille (2).  
*Triticum pungens* v. *littorale* Syme (2).  
*T. littorale* v. *pycnanthum* Syme (2).

## FILICES.

*Asplenium marinum* L. (2).  
*Lastrea Filix-mas* v. *elongata* Moore (2).  
*Chara vulgaris* v. *longibracteata* Kuetz. (2).  
*Nitella opaca* Agardh (1).

## DISTRICT VI.—THE TEST

This is our largest district.

Mr. Watson has taken the high road running from Salisbury through Stockbridge, Winton, and Petersfield, to separate North from South Hants, and I have taken the same line of road to separate my two Districts, VI. and VII., into north and south sub-districts. The boundary of the northern portion of district VI., written VI. (1), is the boundary of the county to the west, with exception of a very small portion belonging to the Avon watershed cut off from district VI. by the line of hills running N. from Quarley hill. The high line of chalk hills or Downs running from Combe to Highclere and Ewhurst, Sherborne St. John's and Basingstoke, separates district VI. from the Thames catchment basin to the north, the water-parting to the west then runs from Basingstoke to Mitcheldever and Crawley. The whole of this sub-district lies on chalk and to the N. is well-wooded. Sub-district (2), *i.e.* the southern portion of district VI., is also bounded on the west by the county boundary to beyond Bramshaw, near to which our district abuts on the Avon and New Forest districts, and takes in Stoney Cross and Minstead, Eling, Marchwood, and all the western tributaries of the Southampton water to Calshot and Eaglehurst. To the east, the line of water-parting runs from Crawley to Farley and a little east of Redbridge. Therefore we have, in this sub-district, tertiary sands and clays developed to a small extent towards the south, and a considerable seaboard. The extreme northern portion of sub-district (1) has, I think, been little explored; it is well wooded. It is marked by the presence of several xerophilous species, and the marshes are remarkably wanting in several hygrophilous species which are abundant on the eugeogenous soil of the extreme southern part of the district. Among rarer species of this district are—

## RANUNCULACEÆ.

*Ranunculus ophioglossifolius* Vill. (2).

## CRUCIFERÆ.

*Brassica Monensis* v. *Cheiranthus* = *B. Cheiranthus*  
Vill. (2).  
*Lepidium Smithii* Hook *i.e.* *alatostyla* Towns. (2).

## HYPERICINÆ.

*Hypericum montanum* L. (2).

## LEGUMINOSÆ.

*Vicia sylvatica* L. (1).

## ROSACEÆ.

*Prunus domestica* L. (2).  
*Rosa mollissima* Fr. (2).  
*Rubus fusco-ater* Weihe (1).

## UMBELLIFERÆ.

*Caucalis daucoides* L. (2).

## COMPOSITÆ.

*Carduus crispus* v. *litigiosus* Gren. & God. (1)

## SCROPHULARINÆ.

*Verbascum Thapso-nigrum* Shied. (1).  
[*Mimulus luteus* L. (1)]

## LABIATÆ.

*Ajuga Chamaepitys* Schreb. (1).

## CHENOPODIACEÆ.

*Chenopodium hybridum* L. (2) casual.

## SALICINÆ.

*Salix alba* v. *coerulea* Sm. (1).  
*S. triandra* v. *Hoffmanniana* Sm. (2).  
*S. Smithiana* v. *rugosa* Bab. (2).

## NAIADACEÆ.

*Potamogeton heterophyllus* Schreb. (2).



# BOTANY

## ORCHIDÆ.

*Orchis hircina* Scop. (1).  
*Ophrys aranifera* Huds. (1).

## CYPERACEÆ.

*Carex dioica* L. (1).  
*C. montana* L. (2).

## GRAMINEÆ.

*Spartina Townsendi* H. & J. Groves (2).  
*Phleum pratense* L. v. *stoliferum* Bab. (1).  
*Avena fatua* v. *intermedia* Lindgr. (1).

[*Bromus arvensis* L. (1)]  
*Brachypodium pinnatum* Beauv. (1).  
*Triticum repens* v. *barbatum* Duval-Jouve (2).

## FILICES.

*Lastrea Filix-mas* v. *affinis* Bab. (1).

## EQUISETACEÆ.

*Equisetum limosum* Sm. v. *fluviatile* L. (1).

## CHARACEÆ.

*Chara vulgaris* v. *crassicaulis* Kuetz. (1).

## DISTRICT VII.—THE ITCHEN

This district is drained by the Itchen, which is the second largest river taking its rise in county. Three of its tributaries, one from the north, one from the west, and the third from the south or south-east, unite near Old Alresford, whence the combined waters flow nearly due westwards to Abbots Worthy; here the Itchen takes a southerly direction past Winchester to Southton, where it enters the Southton water. It is difficult to trace the water-partings of catchment basins on the chalk. From its absorbent nature, already alluded to, no surface water collects in the numerous smaller valleys, so that only careful trigonometrical survey can determine the water-partings. Such survey was most carefully made by Colonel Greenwood, and in laying down the boundaries of this district I have followed the water-partings as laid down by him, which differ very considerably from those given in the large map of the London basin published by the Ordnance Survey. To the east, district VIII. is altogether bounded by the basin of the Teste, the line parting the two basins running into the Southton water between Redbridge and Millbrook.

To the north the water-parting of the Thames basin from Kempshot to Southrop forms the boundary between this district and district XI.; from thence to Stoner hill, the Thames basin is still the boundary between districts VII. and X.; here the boundary leaves the Thames basin, and from Stoner hill to a point S.W. of Langrish it abuts against district IX. From the last-named point our boundary abuts against district VIII., passing by Kilmeston Down, and Upham, and so on to Netley.

The district comprises very diversified ground. The country around Winton was botanically explored by Mr. I. W. Warner, that about Brookwood by Mr. Pryor, and the Rev. T. Woodhouse, and about Shirley brook by Messrs. Groves. The northern part about Ellisfield, Nutley, Preston, Candover, etc., has been less explored.

The sub-districts are divided by Mr. Watson's line dividing North from South Hants. Among the rarer plants of this district are—

## BERBERIDACEÆ.

[*Berberis vulgaris* L. (1) (2).]

## CRUCIFERÆ.

*Dentaria bulbifera* L. (1).  
*Lepidium rudemale* L. (2).

## GERANIACEÆ.

*Geranium*\* *pyrenaicum* Burm. fil. (1).  
*Erodium moschatum* L'Herit. (2).

## LEGUMINOSÆ.

*Lathyrus palustris* L. (2).

## ROSACEÆ.

*Rubus rhombifolius* Weihe (1) ?  
*R. erythrinus* Genev. (1).  
*R. Colemanii* Blox. (2).  
*R. radula* v. *anglicanus* Rogers (1).  
*R. oigocladus* Muell. & Lefv. (1).  
*R. pallidus* W. & N. (non Bab.) (2).  
*R. rosaceus* v. *infecundus* Rogers (1).  
*R. humifusus* Weihe (2).

## UMBELLIFERÆ.

*Oenanthe fluviatilis* Coleman (1) (2).  
*Caucalis*\* *latifolia* L. (1).

## COMPOSITÆ.

*Serratula tinctoria* v. *monticola* Bor. (2).  
*Antennaria dioica* R. Br. (1).  
*Gnaphalium luteo-album* L. (1) casual ?  
*Senecio viscosus* L. (2).

## CAMPANULACEÆ.

[*Campanula rapunculoides* L.]

## SCROPHULARINEÆ.

*Veronica spicata* L. (2).  
*Melampyrum cristatum* L. (1) (2).  
*Rhinanthus major* Ehrh. (1).

## LABIATÆ.

*Stachys germanica* L. (1).  
*Galeopsis Ladanum* v. *canescens* Schultz sp. (1) (2).  
*Ajuga Chamaepitys* Schreb. (1) (2).

# A HISTORY OF HAMPSHIRE

## LENTIBULARIÆ.

*Utricularia intermedia* Hayne (2).

## SALICINÆ.

*Salix triandra* v. *Hoffmanniana* Sm. (2).

*S. rubra* v. *Forbiana* Sm. (2).

## NAIADACEÆ.

*Ruppia maritima* L. = *R. Spiralis* Hartm. (2).

## LILIACEÆ.

*Gagea lutea* Ker (1).

## CYPERACEÆ.

*Schoenus nigricans* L. (2).

*Eriophorum latifolium* Hoppe (2).

*Carex stricta* Good. (1).

*C. paludosa* v. *Kochiana* Gaud. (2).

## GRAMINÆ.

*Spartina alterniflora* Loisel. (2).

*Anthoxanthum Puelii* Lec. & Lam. (2).

*Bromus madritensis* L. (2).

*B. mollis* v. *compactus* Breb. (2).

## DISTRICT VIII.—THE EAST SOLENT

This comprises the catchment basins of three small streams, the Hamble, our sub-district (1), the Meon or Titchfield river, sub-district (2), and the Wallington, sub-district (3). The two former empty themselves into the Southton water, the last into the Portsmouth harbour at Fareham. The chalk is developed towards the north in each. There is a considerable extent of seaboard. The western boundary of the district is the water-parting between this and district VII. To the N.E. it abuts against district IX., and to the west the boundary is that of Hampshire and Sussex. The southern part has a comparatively small rainfall. The Meon basin is rather poor in species, among the rarer we have—

## CRUCIFERÆ.

*Nasturtium amphibium* R. Br. (3).

*Lepidium Draba* L. (3).

## DROSERACEÆ.

*Drosera anglica* Huds. (3).

## FRANKENIACEÆ.

*Frankenia laevis* L. (2).

## CARYOPHYLLÆ.

*Dianthus prolifer* L. (3).

*Silene nutans* L. (3).

*S. noctiflora* L. (3).

## PARONYCHIÆ.

*Herniaria* \* *glabra* L. (3).

## GERANIACEÆ.

*Geranium pyrenaicum* Burm. fil. (3).

## LEGUMINOSÆ.

*Trifolium maritimum* Huds. (1).

*T. arvense* v. *maritimum* = v. *littorale* Breb. (3).

*Lotus corniculatus* v. *villosus* Seringe (2).

*L. angustissimus* L. (2) (3).

## ROSACEÆ.

*Rubus discolor* v. *hirsutuosus* Genev. (1).

## UMBELLIFERÆ.

*Oenanthe silaifolia* Bieb. (2 or 3).

## RUBIACEÆ.

*Galium erectum* Huds. (1).

## COMPOSITÆ.

*Gnaphalium luteo-album* L. (3).

*Senecio viscosus* L. (1).

*Hieracium maculatum* Sm. (2). = *vulgatum* Fr. v. *maculatum*.

## CAMPANULACEÆ.

*Jasione montana* v. *littoralis* Fr. (3).

## GENTIANÆ.

*Erythræa pulchella* v. *tenuiflora* Link (3).

## SCROPHULARINÆ.

*Melampyrum cristatum* L. (2).

## LABIATÆ.

*Mentha sylvestris* L. (1).

[*Calamintha Nepeta* Clair. (3).]

*Stachys palustris* v. *ambigua* = *S. sylvatica* × *palustris* Wirtg. (1).

## BORAGINÆ.

*Myosotis palustris* v. *strigulosa* Mert. & Koch (2).

## LENTIBULARINÆ.

? *Utricularia Bremii* Heer (2).

## CHENOPODIACEÆ.

*Suaeda fruticosa* Forsk. (3).

*Salicornia radicans* v. *lignosa* Woods (3).

*S. herbacea* v. *ramosissima* Woods (3).

*Chenopodium ficifolium* Sm. (3) casual.

## POLYGONACEÆ.

*Rumex* \* *maritimus* L. (3).

*R. \** *palustris* Sm. (3).

## EUPHORBIACEÆ.

*Euphorbia Paralias* L. (3).

*E. portlandica* L. (3).

## SALICINÆ.

*Salix undulata* Ehr. = *triandra* × *viminalis* (2).

*S. acuminata* Sm. (1).

*S. laurina* Sm. (3).

## ORCHIDÆ.

*Orchis latifolia* × *maculata* (1).

## JUNCACEÆ.

*Juncus acutus* L. (3).

## CYPERACEÆ.

*Carex punctata* Gaud. (3).

## GRAMINÆ.

*Alopecurus fulvus* Sm. (3).

*Phleum arenarium* L. (3).

*Polypogon Monspelienis* Desf. (3).

*P. littoralis* Sm. (3).

*Sclerochloa maritima* v. *riparis* Towns. (1).

*Bromus secalinus* v. *velutinus* Schrad. (1).

*B. commutatus* v. *pubescens* Lond. Cat. (1).

## CHARACEÆ.

*Chara connivens* Braun (3).

*C. vulgaris* v. *longibracteata* Kuetz. (3).

*Tolypella glomerata* Leonh. (3).



# BOTANY

## DISTRICT IX.—THE ARUN

The Rother, the Meon, the Itchin, and the Wey, all take their rise from hills in the neighbourhood of Petersfield.

The Rother, which drains this district, is a tributary of the Arun, which runs into the Channel near Arundel. To the south it is bounded by district VIII., Butser hill being the extreme S.W. boundary; to the west by a small portion of district VIII. and of VII. as far as Stoner hill, and from this northwards the water-parting of the Thames basin forms the boundary; to the east the boundary line is that which separates Hampshire from Sussex. To the west and east there are high chalk Downs, but the lower ground being occupied by the greensand and gault, etc., there is considerable variety of soil within so small an area.

The heath at Petersfield is so much drained that I believe there is little or no chance of ever finding *Isnardia palustris* again. The small stream which carries the water from the pond through the heath is carefully cleaned out periodically. *Callitriche stagnalis* is most abundant, quite filling the ditch in many places. The bog district is remarkably poor. The rarer plants are—

CARYOPHYLLÆ.  
*Silene gallica* v. *quinquevulnera* L.

LEGUMINOSÆ.  
*Melilotus alba* Lam.  
*Lathyrus sylvestris* L.

ROSACEÆ.  
*Rubus Reuteri* Merc.

ONAGRARIÆ.  
*Isnardia* \* *palustris* L.  
*Circaea* \* *alpina* L.

SAXIFRAGÆ.  
*Chrysosplenium alternifolium* L.

COMPOSITÆ.  
[*Erigeron Canadensis* L.]

CAMPANULACÆ.  
*Phyteuma orbiculare* L.

*Campanula Rapunculus* L.  
*C. patula* L.

BORAGINÆ.  
*Myosotis palustris* v. *strigulosa* Mert.  
*Myosotis sylvatica* Ehrh.

EUPHORBIACÆ.  
*Mercurialis annua* v. *ambigua* L.

ORCHIDÆ.  
*Aceras anthropophora* R. Br.

CYPERACÆ.  
*Carex ovalis* v. *bracteata* Syme

GRAMINÆ.  
*Aira caryophyllæa* v. *patulipes* Jord.

FILICES.  
*Lastrea Thelypteris* Presl

## DISTRICT X.—THE WEY

This is the first district comprised within the Thames basin, being drained by tributaries or the Wey, which falls into the Thames at Weybridge in Surrey. It is bounded to the E. by district VII. and to the S. by district IX., and to the west by the boundary line dividing Hampshire from Surrey. Selborne, the home of Gilbert White, is in this district. There is no water in the brook at Selbourne during summer, the flow ceasing in summer, as mentioned by Gilbert White in his Nat. Hist. of Selborne. Woolmer heath and forest also afford interesting ground to the botanist. Among the rarer plants we have—

RANUNCULACÆ.  
*Helleborus foetidus* L.

PAPAVERACÆ.  
*Papaver Lecoquii* Lamotte

POLYGALACÆ.  
*Polygala serpyllacea* v. *ciliata* Lebel.

LEGUMINOSÆ.  
*Astragalus glycyphyllos* L.  
*Lathyrus sylvestris* L.

ROSACEÆ.  
*Prunus domestica* L.

ONAGRARIÆ.  
*Epilobium lanceolatum* Seb. & Maur.

CRASSULACÆ.  
[*Sedum dasyphyllum* L.]

SAXIFRAGÆ.  
*Chrysosplenium alternifolium* L.

ERICACÆ.  
*Calluna vulgaris* v. *incana* auct.  
LABIATÆ.

*Mentha sylvestris* L.  
[*Calamintha Nepeta* Clairv.]

POLYGONACÆ.  
*Polygonum Convolvulus* v. *pseudo-dumetorum* Watt.

NAIADACÆ.  
*Potamogeton obtusifolius* M. & K.

ORCHIDÆ.  
*Aceras anthropophora* R. Br.  
*Epipactis violacea* Dur.

GRAMINÆ.  
*Festuca heterophylla* Lam.

FILICES.  
*Athyrium Filix-fœmina* v. *molle* Roth

CHARACÆ.  
*Chara vulgaris* v. *longibracteata* Kuetz.

# A HISTORY OF HAMPSHIRE

## DISTRICT XI.—THE LODDEN

This is the second district on our list which lies within the Thames basin ; the greater portion towards the north and east is drained by the Blackwater, which forms the county boundary, first of Surrey and Hants, secondly of Berkshire and Hants, from near Farnham to Eversley and Heckfield ; to the west it abuts against district XII., and to the south against districts VI., VII., and X. To the east about Basingstoke we have a considerable portion of chalk, but the greater area is occupied by tertiary sand loams and clays geologically belonging to the Thames basin. The Basingstoke canal runs in an irregularly east and west direction from Basingstoke to Odiham and Aldershot. A great extent of the district has been only very partially explored by the botanist. The rarer plants are—

RANUNCULACEÆ.  
[*Delphinium Ajacis* *Reich.*]

BERBERIDACEÆ.  
[*Berberis vulgaris* *L.*]

CRUCIFERÆ.  
[*Iberis amara* *L.*]

VIOLARIÆÆ.  
*Viola lactea* v. *intermedia* *Wats.*

ELATINÆÆ.  
*Elatine hexandra* *D.C.*  
*E. hydropiper* *L.*

LEGUMINOSÆ.  
*Melilotus arvensis* *Wallr.*

ROSACEÆ.  
*Pyrus Scandica* *Syme*  
*P. semipinnata* *Roth*  
*Rubus rosaceus* v. *infecundus* *Rogers*

UMBELLIFERÆ.  
*Oenanthe fluviatilis* *Coleman*

COMPOSITÆ.  
*Carduus pratensis* × *palustris* *Syme*

CAMPANULACEÆ.  
[*Campanula rapunculoides* *L.*]  
*C. Rapunculus* *L.*

SCROPHULARINÆÆ.  
*Veronica scutellata* v. *pubescens* *Hook. fil.*

LABIATÆ.  
*Mentha sativa* v. *paludosa* *Sole*

LENTIBULARIÆÆ.  
*Utricularia neglecta* *Lehm.*

PRIMULACEÆ.  
*Hottonia palustris*, *L.*

CUPULIFERÆ.  
*Quercus Robur* v. *intermedia* *D. Don*

NAIADACEÆ.  
*Potamogeton rufescens* *Schrad.*  
*P. heterophyllus* *Schreb.*  
*P. mucronatus* *Schreb.*

ALISMACEÆ.  
*Alisma Plantago* v. *lanceolata* *Afz.*

CYPERACEÆ.  
*Eriophorum gracile* *Koch*  
*Carex dioica* *L.*  
*C. elongata* *L.*  
*C. Hornschuchiana* × *minor* (or *Oederi*)  
*C. Oederi* *Retz*

GRAMINÆÆ.  
*Agrostis Spica-Venti* *L.*  
*Aira setacea* *Huds.*

LYCOPODIACEÆ.  
*Lycopodium Selago* *L.*

EQUISETACEÆ.  
*Equisetum palustre* v. *subnudum* *Lond. Cat.*

CHARACEÆ.  
*Chara fragilis* *Desv.*  
*C. aspera* v. *subinermis* *Kuetz.*  
*Nitella mucronata* *Kuetz.*  
*N. opaca* *Agardh*

## DISTRICT XII.—THE KENNET

This is the third and last district which lies within the Thames basin. It lies to the extreme N.W. of the county, being bordered by district VI. to the S., and by the Berks and Hants boundary to the N., while to the E. it abuts on district XI. ; and the Emborne forms the greater portion of this northern boundary. The southern portion is occupied by chalk, which rises to a great height, forming some of the highest ground in the county ; by denudation the greensand is exposed to a small extent at Sidmonton ; the northern portion of this district is occupied by tertiary sands, clays, and loams. *Potamogeton obtusifolius* had been detected only in this district until lately found by Mr. Beeby in district X. ; *Bromus arvensis* is found abundantly in this District ; *Glyceria pedicellata* is the common Flote-grass. The rarer plants are—

PAPAVERACEÆ.  
*Papaver Lecoqii* *Lamotte*

CRUCIFERÆ.  
*Nasturtium amphibium* *R. Br.*

CARYOPHYLLÆÆ.  
*Spergula arvensis* v. *sativa* *Boenn.*

LEGUMINOSÆ.  
*Vicia gracilis* *Loisel.*



## BOTANY

<p style="text-align: center;">ROSACEÆ.</p> <p>Prunus Cerasus <i>L.</i> Sanguisorba officinalis <i>L.</i></p>	<p style="text-align: center;">SALICINÆÆ.</p> <p>Salix pentandra <i>L.</i> <i>S. rubra</i> <i>Huds.</i></p>
<p style="text-align: center;">CRASSULACEÆ.</p> <p>Sedum dasyphyllum <i>L.</i></p>	<p style="text-align: center;">NAIADACEÆ.</p> <p>Potamogeton obtusifolius <i>M. &amp; K.</i></p>
<p style="text-align: center;">GENTIANÆÆ.</p> <p>Gentiana Amarella v. germanica, = <i>G. germanica</i> <i>sp. Willd.</i></p>	<p style="text-align: center;">ORCHIDÆÆ.</p> <p>Aceras anthropophora <i>Br.</i> Epipactis violacea <i>Dur.</i></p>
<p style="text-align: center;">EUPHORBIACEÆ.</p> <p>[<i>Buxus sempervirens L.</i>]</p>	<p style="text-align: center;">GRAMINÆÆ.</p> <p>[<i>Bromus arvensis L.</i>] <i>Triticum repens v. barbatum Duval Jouve</i></p>

### THE BRAMBLES (*Rubi*)

In the latest edition of *The London Catalogue of British Plants* (published in 1895) the British Isles are credited with 100 species and 55 varieties of the genus *Rubus*, including raspberry, dewberry, cloud-berry, and brambles generally. Of the 100 species enumerated it is considered that 52 in all, with 17 varieties, have thus far been found in Hants and the Isle of Wight, and I have seen specimens of 47 of the species and 12 of the varieties. To these must be added 2 out of 9 further species found in the British Isles since 1895, and 1 out of 9 further varieties, bringing the total to 54 species and 19 varieties for the county as a whole.

If we divide the aggregate county into North Hants, South Hants, and the Isle of Wight, the numbers stand thus :—

North Hants, 32 species and 9 varieties, out of which 5 species and 1 variety are unknown for the other two vice-counties.

South Hants, 44 species and 9 varieties, with 14 species and 3 varieties unknown for the other vice-counties.

Isle of Wight, 27 species and 7 varieties, with 3 species and 4 varieties unknown for the other vice-counties.

Under these circumstances it is not surprising to find that out of the grand total of 54 Hants species and 18 varieties, only 18 species and 3 varieties are common to all three vice-counties; all these 21 bramble forms belonging to our most widely distributed British plants. Further research—in North Hants and the Isle of Wight especially—will no doubt increase this number of common Hants *Rubi*. The following frequent British species especially, as yet recorded from two only of the three vice-counties, will probably, all or most of them, be yet found in the third, where at present they are unknown: *R. affinis*, *R. micans*, and *R. Balfourianus* in North Hants; *R. argentatus* and *R. radula* (type), with the caesian varieties *cyclophyllus* and *tenuis* in South Hants; and *R. pyramidalis*, *R. Babingtonii*, and *R. foliosus* with the several varieties *anglicanus*, *ericetorum*, and *dasyphyllus* in Isle of Wight.

Of the forms as yet found in one only of the three vice-counties, the following seem the most interesting :—

## A HISTORY OF HAMPSHIRE

In North Hants only, *R. rudis* and *R. Marshalli*, with the recently described *R. Scheutzii* and *R. cinerosus*.

In South Hants only, *R. nitidus*, *R. integribasis*, *R. nemoralis*, *R. anglosaxonicus*, *R. melanodermis*, *R. Bellardii*, and *R. serpens*.

In Isle of Wight only, *R. Salteri* and *R. Borreri*.

The rarest of these are *R. Scheutzii*, *R. integribasis*, *R. melanodermis*, and *R. Salteri*; two of which (*integribasis* and *melanodermis*) are locally abundant in S.-E. Hants, while *R. Salteri* has long been known in a single Isle of Wight locality, and *R. Scheutzii* been recently discovered in North Hants.

The Hants species are fairly well distributed through the several groups into which the genus has been divided: the *Egregii* and *Bellardiani* being the only two groups which are but indifferently represented. It must be remembered, however, that the South Hants brambles are probably much better known than those of the other two vice-counties; North Hants especially having been apparently but little explored by bramble collectors as yet.

### THE ROSES (*Rosæ*)

The Roses of Hampshire are abundant and varied, though apparently limited to forms essentially southern. The more northern species, *Rosa Sabini* (Woods) and *R. mollis* (Sm.), have indeed been reported from the Isle of Wight, and the latter also from Fawley, in North Hants; but probably in error in the case of both species. The true *R. mollis* is almost certainly absent from all the southern counties of England, and *R. Sabini* is now generally admitted to be one of several hybrids produced by the crossing of *R. pimpinellifolia* and *R. mollis*. In the same way *R. glauca* (Vill.) and its several segregates (*i.e.* the Subcristate section of *R. canina* in Baker's monograph) are all absent, though some of them are occasionally simulated by partially subcristate forms of *R. canina*, occurring in the more hilly districts of all the southern counties. On the other hand one at least of the essentially southern roses, *R. leucobroa* (Desv.), seems to reach its most northern British station near Lyndhurst—its only known Hampshire locality; while another southern species, *R. systyla* (Bast.), is not only frequent in Hants and the Isle of Wight, but occurs also, more sparingly, in several counties further north. The common and most universally distributed roses of the county belong mainly to the great aggregate species, *R. tomentosa* (Sm.) and *R. canina* (Linn.). In the 9th edition of the *London Catalogue of British Plants*, Great Britain is credited with ten varieties of *R. tomentosa*, and fifteen of *R. canina*, together with five forms of the latter. Generally the varieties of *R. tomentosa* seem less strongly marked than those of *R. canina*, and their distribution as segregates in Hampshire is very imperfectly known; but var. *sylvestris* (Woods) seems fairly common, while vars. *subglobosa* (Sm.) and *scabriuscula* (Sm.) no doubt occur both in the Isle of Wight



## BOTANY

and on the mainland, and the plant recorded as *R. mollis* (Sm.), in *Fl. Hants*, is probably the *tomentosa*, var. *pseudo-mollis* (E. G. Baker). Of the *R. canina* varieties, *lutetiana* (Leman) and *dumalis* (Bechst.) may safely be described as generally distributed on both island and mainland, *urbica* (Leman) as only fairly frequent on the mainland, and apparently quite rare in the island, while vars. *vinacea* (Baker), *arvatica* (Baker), and *dumetorum* (Thuill.) and the glandular-pedicelled forms *andegavensis* (Bast.) and *verticillacantha* (Mérat.) occur occasionally. The neat, small-leaved, small-flowered, short-pedicelled *R. obtusifolia* (Desv.) (for a time regarded as a *canina* var.) is frequent enough, and especially abundant on the southern border of the New Forest; but its var. *tomentella* (Leman) seems decidedly uncommon. The other British species occurring in the county call for little remark. *R. pimpinellifolia* (Linn.) is, as usual, local, though abundant on some of the sandy heaths and neighbouring wood-borders and hedges, as well as on the chalk hills and sandy coasts. *R. rubiginosa* (Linn.) in many of its numerous Hampshire localities may be as doubtfully native as elsewhere in England, but it is no doubt really indigenous on the chalk, and probably here and there elsewhere; while its near ally, *R. micrantha* (Sm.), is one of the most frequent roses of heaths and bushy places in the wilder parts of Hampshire as of the neighbouring counties.

The beautiful white-flowered field rose, *R. arvensis* (Huds.), seems quite generally distributed, and usually very abundant.

## THE MOSSES (*Musci*)<sup>1</sup>

The conditions determining the comparative richness or poverty of the moss flora of a district are without doubt complex, though less so than those that regulate the character of its flowering plants. Two factors, however, may be pointed out as certainly of primary importance, one being the nature of the exposed rock, soil, or other matrix suitable for the growth of mosses; the second the general degree of humidity of the atmosphere. The former, it will perhaps be said, must be an important factor with all vegetation. It is, however, the case with mosses in a more marked degree than with the higher plants, partly for the reason above mentioned, that the conditions determining the distribution of flowering plants are more complex than those affecting the existence of mosses. Hence, so long as we are dealing with a limited

<sup>1</sup> The published information relating to the Mosses of Hampshire consists mainly of reports drawn up from voucher specimens sent in to the Botanical Record Club, collected principally by the Rev. E. D. Heathcote, Dr. H. F. Parsons, and Mr. E. D. Marquand; together with lists in local scientific publications, by C. B. Clarke, H. Reeks, and F. I. Warner. There are also in addition some unpublished records of other botanists, among whom should be mentioned the late Mr. R. Southey Hill, who made collections of both mosses and lichens, the former of which, kindly lent by Mr. Wyndham S. Portal, of Malshanger, has been of material assistance in the preparation of this article, adding several species to the list of those hitherto on record for the county.

## A HISTORY OF HAMPSHIRE

area, such as that of Great Britain, if the exact nature of the rock or soil of a district be known, the prevailing character of its moss flora can be predicted with much greater certainty than can that of its flowering plants.

A glance at the geological conditions of Hampshire will pretty readily show what may be expected to be the prevailing character of its mosses. The complete absence of the older rocks from the surface strata, together with the marked prevalence of softer soils, is very unfavourable to the development of a rich moss flora. The most favourable conditions for moss life (leaving for the moment the arboreal species out of the question) occur where, as in mountainous regions, these older and harder rocks prevail, for the reason that, with the exception of the hardest granites, quartzites, etc., they afford a suitable habitat for mosses (as for lichens), even on their bare surfaces, while, with rare exceptions, no other plants can so much as find a footing upon them. As a rule, the rupestral or rock-inhabiting mosses belong to different genera and species from those growing on earth and other surfaces ; it is clear, therefore, that the absence of this class of rock not only renders the moss vegetation of a county far less rich and abundant, but also largely reduces the number of species to be found. Hence the total absence from Hampshire of the genus *Andreaea*, and its poverty in species of *Grimmia*, of which genus only two representatives are known to occur ; while in Devonshire, under very similar climatal conditions, as many as fourteen species have been recorded. Even the chalk, which forms so considerable a proportion of the surface of the county, readily lends itself to the formation of humus, and it is only in the case of cliffs, old chalk pits, etc., that it offers to mosses any considerable surface that may not as readily be seized upon by flowering plants.

Probably the only rocks that occur within the county borders in any appreciable quantity, of sufficient hardness to resist the encroachment of flowering plants, are the cliffs and boulders of the Upper Greensand along the Undercliff on the south-eastern shore of the Isle of Wight. Here occur some of the rarest and most interesting of the mosses of the county, e.g. *Eurhynchium circinatum*, *E. crassinervium* in fruit, *E. abbreviatum*, *E. Swartzii* (var. *rigidum*), *Plagiothecium depressum*, and *Mnium stellare* ; and there is every probability that further search in this locality would yield additional interesting varieties.

The importance of the second factor above referred to, viz. the influence of the humidity of the atmosphere on the distribution of mosses, is at once obvious if the arboreal species be studied. In a wood of oak, birch, hazel, etc., in the comparatively dry atmosphere of our midland or eastern counties, the moss growing on the tree trunks (above the roots) will be limited to a very few species, and will rarely occur in any quantity. But visit a wood of precisely the same constituent trees in the more humid atmosphere of our western coast, or of a mountain district, where the condensation is great, and almost every tree will be clothed with an abundant coating of moss, while a single trunk will often



## BOTANY

furnish as many arboreal species as were to be found in the whole of the former wood. In this respect Hampshire occupies a medium position ; it would probably compare favourably with the majority of our midland and eastern counties, but very poorly with those of the more hilly and mountainous districts of the west and south-west. There are, of course, many kinds of moss which flourish where there is a very small amount of moisture, atmospheric or otherwise, such as the Pottiæ and the minute Phascoid mosses, several rare species of which occur on the chalky soil of the Downs, etc. These, being annuals, attain their complete development in the short space of a few months between autumn and spring, when the moisture of air and soil is at its maximum. Others, again, of longer growth, overcome the adverse conditions of drought by passing through a dormant stage at such times. Such mosses, for instance, as *Bryum cæspitium* and *Grimmia pulvinata*, which grow on bare rocks or the tops of stone walls, or *Neckera crispa*, *Trichostomum crispulum*, *Thuidium abietinum*, and *Tb. hystricosum*—one of the most interesting of the Hampshire mosses, because not known out of England, and here only in three or four counties—all of which are found on dry, barren, chalky banks, must be almost entirely deprived of moisture for long periods during a hot summer. At such times they shrivel up and make no growth, until the drought is past and the rains of autumn and winter induce a more active vitality.

In the New Forest area we have the nearest approach, within this county, to the most suitable conditions for moss life, and here are found some of the rarest and most characteristic mosses of the Hampshire flora. The Sphagna, or peat mosses, of which ten species and several varieties are known to occur in Hampshire, are found in profusion in the low-lying bogs, with several of the Harpidioid Hypna, one or two species of Campylopus, and other marsh mosses. One of the rarest species, and one apparently becoming everywhere less common than formerly, is the *Splachnum ampullaceum*, the only Hampshire representative of the curious Order Splachnaceæ. Confined, like most of its order, to patches of decaying animal matter, it forms small tufts in bogs, conspicuous by its colour and by the remarkable and elegant form of its fruit, which, with the strangely swollen fruitstalk at the base of the capsule strikingly resembles a roman water-pot or ampulla, whence it derives its specific name.

In the New Forest, too, the arboreal species find their highest development, including the Neckera, Orthotricha, and Ulotæ. One of the finest species of the genus Orthotrichum, viz., *O. Lyellii*, was first observed in the Forest, though now recognized as a widely spread and not uncommon moss in Britain, and was named in 1818, by Hooker and Taylor, after its discoverer, Mr. Charles Lyell, father of the eminent geologist, and one of the earliest students of mosses in our country. *Neckera pumila*, another of our less common arboreal mosses, grows here in plenty, occasionally in the rare and very pretty var. *Philippeana*, which, with its deeply and regularly undulated leaves ending in long, wavy hair-

## A HISTORY OF HAMPSHIRE

points, presents so different an appearance from the typical plant as to have been considered for some time a distinct species.

One of the species of *Ulota*, viz. *U. phyllantha*, which occurs, but not commonly, on tree trunks in the Forest, is of special interest, as showing the adaptability of certain species to conditions generally adverse to moss life, and, indeed, to vegetable life in general. It is found close by the sea, as for instance at the Land's End and at the Giant's Causeway, where it occurs in great abundance and in fine condition on rocks almost at sea-level, where scarcely any other plant can grow; while it has been found growing vigorously towards the summit of Chimborazo, at almost the extreme alpine limit of vegetation.

The Forest has long been known as a classical locality for the fruit of *Leucobryum glaucum*, a common moss in the barren state, forming wide patches and cushions on moors and in peaty woods, conspicuous (especially when dry) by their whitish colour, the leaves being composed of a spongy tissue almost deprived of chlorophyll or any colouring matter. This may be found fruiting in several spots in the Forest, and would seem to show that the conditions here are favourable to its fullest development. This is further exemplified by the occurrence in the Forest of a second species, *L. albidum*, Lindb., which was added to the British Flora in 1882, being discovered by Piffard in two localities within the Forest area. There is some doubt as to the specific value of this plant, but in the form which occurs here, with marked fruiting characters, it is certainly very distinct from *L. glaucum*. It has not been recorded, at least with certainty, from any other British station.

One of the rarest mosses of this area is *Bryum alpinum*, only a small quantity of which has been gathered on heathland near Lyndhurst, at no great elevation. As its name implies, this is properly a mountain moss, usually growing on wet rock ledges at considerable altitudes, but also frequently descending, in mountainous and subalpine districts, to very low levels. Its presence in similar habitats in Cornwall and Devonshire, even almost at sea level, indicates that it is not in Hampshire a merely casual introduction, but is probably a lingering relic of the somewhat more northern or alpine vegetation that prevailed many centuries earlier.

The number of species of moss at present known to occur in Hampshire is about 210, but there is no doubt that the list might be very considerably increased by a more systematic investigation than the subject has yet received. A list is appended of some of the less common species, classified with reference to their distribution.

### MOSSES CHARACTERISTIC OF CHALK OR LIMESTONE

*Seligeria paucifolia*, Carr.  
— *calcareae*, B. & S.  
*Phascum curvicolle*, Ehrh.  
*Pottia recta*, Mitt.  
— *Starkeana*, C. M.

*Tortula pusilla*, Mitt.  
— *rigida*, Schrad.  
*Weisia tortilis*, C. M.  
*Trichostomum crispulum*, Bruch.  
*Thuidium abietinum*, B. & S.  
— *hystricosum*, Mitt.  
*Hypnum chrysophyllum*, Brid.



## BOTANY

### MOSES CONFINED TO OR CHARACTERISTIC OF THE SOUTH COAST

- Funaria microstoma*, B. & S.
- Brachythecium illecebrum*, De Not.
- Eurhynchium Swartzii* var. *rigidum*, Boul.
  - *abbreviatum*, Schp.
  - *tenellum* var. *scabrellum*, Dixon.
  - *circinatum*, B. & S.
  - *striatulum*, B. & S.

### MOSES CHARACTERISTIC OF BOGS OR MARSHY GROUND

- Campylopus flexuosus* var. *uliginosus*, Ren.
- *atrovirens*, De Not.
- *brevipilus*, B. & S.
- Splachnum ampullaceum*, L.

- Philonotis calcarea*, Schp.
- Hypnum exannulatum*, Güm. b.
- *scorpioides*, L.
- *stramineum*, Dicks.
- *cordifolium*, Hedw.
- *giganteum*, Schp.

### ARBOREAL MOSES

- Tortula papillosa*, Wils.
- Ulota phyllantha*, Brid.
- Orthotrichum stramineum*, Hornsch.
- *tenellum*, Bruch.
- *pulchellum*, Sm.
- Neckera pumila* var. *Philippeana*, Milde.
- Pterogonium gracile*, Sw.
- Antitrichia curtipendula*, Brid.
- Leptodon Smithii*, Mohr.

## THE LIVERWORTS (*Hepaticæ*)

The *Hepaticæ*, scale-mosses, or liverworts, are as a group closely allied to the true mosses, and the conditions of growth are very similar in the two groups, the principal differences lying in an even greater preference for a moist situation and humid atmosphere on the part of the scale-mosses than is indicated by the mosses themselves. Hence it would hardly be expected that Hampshire would prove very rich in these plants. On the other hand, the New Forest, which we should naturally expect would prove the most favourable part of the county, undoubtedly produces a certain number of rare species, for the most part recorded more than half a century ago. Since the subject appears to have been almost entirely neglected of late years by local botanists, it would perhaps be safer to consider our present knowledge comparatively imperfect than to assume too hastily that the list of rare and interesting species is yet exhausted.

Most or all of these early recorded species were found by Mr. Charles Lyell, whose name has been referred to in connection with the mosses. Lyell gave much study to the *Hepaticæ*, and his name is commemorated in the species named by Hooker *Jungermannia Lyellii*, now known as *Pallavicinia Lyellii*. Another of Lyell's discoveries, *Scalia Hookeri* (Sm.), is believed to be now extinct in the New Forest, and is, indeed, only known to exist in Britain within a very small area in West Inverness. Other species of interest were *Cephalozia Francisci* (Hook.), *Lejeunea inconspicua* (Radd.), *Plagiochila spinulosa* (Dicks.), *Eucalyx hyalina* (Lyell), and *Reboulia bemisphærica* (L.).

## THE LICHENS (*Lichenes*)

*Classification.*—The lichens are classed with the ferns, mosses, fungi, and seaweeds, all of which have no blossoms and no seeds, but are

## A HISTORY OF HAMPSHIRE

reproduced by spores, and so form a very natural group by themselves. Now in this group the lichens come in, exactly between the seaweeds (*Algæ*) and the fungi.

The leaf-like growth, called the thallus, allies the lichens closely to the *Algæ*; while the spores being borne in sacs (*asci*), each ascus containing normally eight spores, allies them very closely with the fungi; but they possess other characteristics which keep them quite separate from each of these near neighbours.

We might say in passing, that a theory has been suggested, that lichens are but fungi living parasitically upon *Algæ*. This is known as the 'Dual Theory,' but its discussion would be out of place here.

Lichens vary much in their outward form, but may be described under four heads, viz.:

The *Crustaceous*, or those whose thallus is formed of granules, in more or less smooth patches, on trees, stones, or on the ground.

The *Foliaceous*, or those whose thallus is formed of leaf-like expansions, sometimes closely appressed to the stone or tree, at others only slightly attached by root-like rhizinae. The colour of these is very varied, sometimes brilliant yellow, at others many shades of green, brown, and grey.

The *Filamentous*, or those whose thallus is thread-like, and which hang in tiny tufts from trees, or form long pendulous masses, with many intermediate lengths, while others are found in tangled masses, almost like dark brown hair, growing on rocks.

The *Fruticose*, or those whose thallus is erect, and grow like minute shrubs or trees; some with branches only, others forming leafy expansions, in branch-like form.

There are a few other forms, but these four general divisions will be found sufficient in commencing their study.

*Habitat*.—Lichens are to be found in many different situations; their home seems almost everywhere.

Lichens love pure fresh air and bright sunshine. They often choose the most exposed rocks and boulders, where they will have to stand the fiercest storms. They cover the cold and exposed sides of the trunks of trees in the woods and parks, thus sheltering them from the cold winds, while they themselves do no harm to the trees.

Some lichens may be found amongst the short grass on the downs, others delight in the moist earth of the bog land, and others, with their scarlet fruit, deck the peaty earth amongst the heather on the moorland heaths. The pretty green chalices of the *Cladonias* love shady banks, but are found on walls, roots of trees, and everywhere where moisture and fresh air abound.

Many lichens are found on the bark of old trees in parks and fields. Young plantations seldom reward the search.

Some parts of the New Forest are a perfect paradise for lichens. They cover the trees and bushes, even clinging in rich profusion to their branches, and to the very tips of their small twigs. They cover the old



## BOTANY

oak rails and fences, turning them into gardens of beauty ; while the broken branches, scattered all over the ground in the woods, are covered with specimens ready to hand for examination.

Lichens of the crustaceous kinds may be found closely covering the surface of exposed flints on the hills, adhering to stone walls, or clinging to the rocks on the cliffs, and some find a home on the boulders splashed by the waves of the sea. These alone would yield an interesting collection, sixteen species having been found between high and low water mark on the shore.

*Uses.*—The lichens form a link in the chain of nature, and occupy an important position, as they are the first kind of vegetation to develop on bare rocks or newly-built walls, and so prepare the way for other and more delicate plants to follow.

The soft velvety lichens on stone walls, and on the roofs of houses, tone down crude colouring in the landscape, and many an angular boulder and rugged tree-trunk is rendered beautiful by the overgrowth of lichens.

The Reindeer moss (*Cladina rangiferina*) is abundant on the cliffs amongst the heather near Bournemouth, specimens there being four inches high. It is also found on moorlands throughout the county. This lichen is the principal food of the reindeer in the Arctic regions.

Iceland moss (*Cetraria Islandica*) is a lichen used in medicine, but is not recorded from this county. Several other lichens were formerly used, but have now mostly been superseded.

Irish moss, found all round our coast, is not a lichen, but a seaweed. It is largely used for making jelly.

The litmus paper, so invaluable as a test for acid, is made from a lichen (*Roccella tinctoria*), which is recorded from the rocks of this county, although that used in commerce comes mostly from Madeira and the Canary Islands.

Some of the crustaceous lichens (*Lecanoras*) were used by the Scotch, as cudbear, to dye their home-spun woollen garments ; but now they are being fast superseded by aniline dyes.

A very rare lichen (*Pertusaria incarnata*) which grows on flints, forming a zonal thallus closely appressed, with little circular cups containing the spores, has been found in Freshwater Bay, Isle of Wight, and is the only specimen found in England, one other only having been seen before, and that from the Irish coast.

The Golden wall lichen (*Phycia parietina*) is a general favourite, and is as plentiful as it is beautiful, with its thallus growing in starlike patches, in the central portion of which may generally be found a number of apothecia containing the spores. The bright yellow of this lichen enlivens many a tree trunk, many a rock and stone, and it adapts itself so well to its surroundings that it grows on a vast number of different materials, as brick walls, tiled roofs, iron rails, and even on old glass windows.

# A HISTORY OF HAMPSHIRE

## THE LICHEN FLORA OF HAMPSHIRE<sup>1</sup>

### COLLEMEI

- Collema ceraniscum*, Nyl. *Chalky banks*  
 — *crispum*, Huds. *Damp walls*  
 — *limosum*, Ach. *Clayey banks*  
*Leptogium tenuissimum*, Dicks. *Sandy road sides*  
 — *lacerum*, Ach. *Woodmancote Holte*  
 — *tremelloides*, L. *Silchester*  
 — *saturninum*, Dicks. *Dummer*

### CALICIEI

- Sphinctrina turbinata*, Pers. *On Pertusaria*  
*Calicium aciculare*, Sm. *The Vyne*  
 — *hyperellum*, Ach. *Oak bark*  
 — *quercinum*, Pers. *On rails*  
*Coniocybe furfuracea*, Ach. *Clayey banks*  
*Trachylia tympanella*, Fr. *Trees and rails*

### BÆOMYCEI

- Bæomyces rufus*, D. C. *Sandy banks*  
 — *roseus*, Pers. *Heaths, Fleet Pond*  
 — *icmadophilus*, Ehrh. *Heaths, Winchfield*

### CLADONIEI

- Pycnothelia papillaria*, Duf. *Heaths*  
*Cladonia pungens*, Flk. *Moist heaths*  
 — *cervicornis*, Schær. " "  
 — *delicata*, Flk. *Pamber Forest*  
 — " *var. subsquamosa*, Nyl. *Branksome Woods*  
 — *cariosa*, Flk. *Branksome Woods*  
 — *pyxidata*, Fr. *Tree roots and moist banks*  
 — " *var. coespititia*, Flk. *Silchester*  
 — " " *fimbriata*, Hoffm. *Trees and banks*  
 — *gracilis*, Hoffm. *Heaths*  
 — *albicornis*, Flk. "  
 — *furcata*, Hoffm. "  
 — " *var. spinosa*, Flk. *Chalky banks*  
 — " " *recurva*, Hoffm. *Sherborne*  
 — *cornucopioides*, Fr. *Heaths*  
 — *digitata*, *var. macilentata*, Hoffm. *Heaths*  
 — " " *polydactyla*, Flk. "  
 — " " *carcata*, Ach. *Branksome Woods*  
 — " " *clavata*, Ach. *Branksome Woods*  
*Cladina rangiferina*, Hoffm. *Heaths*  
 — *uncialis*, Hoffm. *Heaths*  
 — " *var. adunca*, Ach. *Fleet Pond*  
 — " " *turgescens*, Fr. " "

### ROCCELLEI

- Roccella tinctoria*, D. C. *Rocks, I. of Wight*  
 — *fuciformis*, Ach. " "

### USNEEI

- Usnea barbata*, *var. articulata*, Ach. *Trees*  
 — *barbata*, *var. florida*, L. *Trees*  
 — " " *hirta*, L. "  
 — " " *plicata*, L. "  
 — " " *rubiginea*, Ach. *Trees, Branksome*

### RAMALINEI

- Evernia prunastri*, L. *Trees and rails*  
*Ramalina calicaris*, Hoffm. *Trees, Freshwater*  
 — *farinacea*, L. *Trees and rails*  
 — *fraxinea*, L. "  
 — " *var. ampliata*, Ach. *Trees and rails*  
 — *fastigiata*, Pers. *Trees and rails*  
 — *scopulorum*, Dicks. " "  
 — *pollinaria*, Ach. *Boarded buildings*  
 — *cuspidata*, Ach. *Rocks, Isle of Wight*

### CETRARIEI

- Cetraria aculeata*, Fr. *Heaths*  
*Platysma sæpincola*, Ehrh. *Branksome Woods*  
 — *diffusum*, Web. *Rails, Farleigh*

### PELTIGEREI

- Peltigera canina*, L. *Banks*  
 — *polydactyla*, Hoffm. *Heathy banks*  
 — *rufescens*, Hoffm. "

### PARMELIEI

- Stictina scrobiculata*, Scop. *Kempshott Wood*  
*Sticta pulmonaria*, Ach. " "  
*Parmelia caperata*, L. *Trees*  
 — *olivacea*, L. *Trees*  
 — *physodes*, L. "  
 — *perlata*, L. "  
 — *pertusa*, Schrank. *Trees*  
 — *tiliacea*, Ach. *Christchurch*  
 — *saxatilis*, L. *Trees and rocks*  
 — " *var. furfuracea*, Schær. *Trees and rocks*  
 — *Borreri*, Turn. *Manydown Park*  
*Physcia flavicans*, Sw. *Trees and rocks*  
 — *parietina*, L. *Trees and rocks*  
 — " *var. lichneæ*, Ach. *Trees*  
 — " " *polycarpa*, Ehrh. "  
 — *ciliaris*, L. *Trees*  
 — *stellaris*, L. "  
 — " *var. tenella*, Scop. *Trees*  
 — " *coesia*, Hoffm. *Tiled roofs*  
 — *adglutinata*, Flk. *Willow bark*  
 — *obscura*, Ehrh. *Trees*  
 — " *var. virella*, Ach. *Trees*  
 — *pulverulenta*, Schreb. *Trees*  
 — " *var. pityrea*, Ach. *Trees*

<sup>1</sup> The lichens are named and classified according to Leighton's *Lichen Flora of Great Britain* (1879).

We are indebted to Wyndham S. Portal, Esq., for permission to inspect the Lichen Herbarium of the late Mr. R. Southey Hill, of Basingstoke.



# BOTANY

## LECANOREI

- Squamaria saxicola*, Poll. *Roof, Manydown Park*  
*Placodium callopismum*, Ach. *Rocks and walls*  
 — *citrinum*, Ach. *Walls and rocks*  
 — *candicans*, Dicks. *Walls, Christchurch*  
*Pannaria nigra*, Huds. *Walls*  
*Lecanora varia*, Ehrh. *Trees and rails*  
 — *atra*, Huds. *Trees and walls*  
 — *subfusca*, L. *New Forest*  
 — „ *var. allophana*, Ach. *Trees*  
 — „ „ *atrynea*, Ach. *Walls*  
 — *expallens*, Ach. *Trees*  
 — *parella*, L. *Exposed flints*  
 — „ *var. pallescens*, L. *Trees*  
 — *albella*, Pers. *Trees*  
 — *arenaria*, Pers. *Old walls*  
 — *sophodes*, Ach. *Trees*  
 — *ferruginea*, Huds. „  
 — *rupestris*, Scop. *Exposed flints*  
 — *pyracea*, *var. ulmicola*, D. C. *Elm trees*  
 — *aurantiaca*, Lightf. *Trees*  
*Pertusaria communis*, D. C. *Trees*  
 — *leioplaca*, Ach. *Trees*  
 — *incarnata*, Leight. *On flint, Freshwater*  
 — *fallax*, Pers. *Trees*  
*Urceolaria scruposa*, L. *Sandy banks*

## LECIDEINEI

- Lecidea coarctata*, Sm. *Hackwood Park*  
 — *albo-atra*, Hoffm. *Oakley Hall*  
 — *dubia*, Borr. *Old railings*  
 — *grossa*, Pers. *Trees*  
 — *calcivora*, Ehrh. *Exposed flints*  
 — *pachycarpa*, Duf. *Heaths*  
 — *incompta*, Borr. *Trees*  
 — *Lightfootii*, Sm. „  
 — *lutea*, Dicks. „  
 — *muscorum*, Sw. *Mosses*  
 — *parasema*, Ach. *Trees*  
 — *myriocarpa*, D. C. „

## LECIDEINEI, continued—

- Lecidea myriocarpa*, *var. pinicola*, Ach.  
*Pine trees*  
 — *prominula*, Borr. *Exposed pebbles*  
 — *quernea*, Dicks. *Oak trees*  
 — *uliginosa*, Schrad. *Turfy ground*  
 — *rubella*, Ehrh. *Trees*  
 — *viridescens*, Schrad. *Elms, Hackwood*  
 — *canescens*, Dicks. *Trees*  
 — *abietina*, Ach. „  
 — *decolorans*, Flk. *Peaty soil*  
 — *fusco-atra*, Ach. *Flints, Meyrick Park*

## GRAPHIDEI

- Opegrapha atra*, Pers. *Trees*  
 — *herpetica*, *var. rubella*, Pers. *Trees*  
 — *Saxicola*, *var. Chevallieri*, Leight.  
*Rocks, Isle of Wight*  
 — *varia*, Pers. *Trees*  
 — *lyncea*, Sm. „ *Tangier Park*  
*Stigmatidium crassum*, Dub. *Trees, Tangier Park*  
*Graphis elegans*, Sm. *Smooth bark of trees*  
 — *scripta*, Ach. *Trees*  
 — „ *var. pulverulenta*, Ach. *Trees*  
 — „ „ *serpentina*, Ach. „  
 — „ „ *recta*, Humb. „  
 — *dendritica*, Ach. *Trees*  
*Arthonia astroidea*, Ach. *Trees*  
 — *swartziana*, Ach. „  
 — *cinnabarinum*, Wallr. *Oak trees*

## PYRENOCARPEI

- Verrucaria viridula*, Schrad. *Brick walls*  
 — *rupestris*, Schrad. *Exposed flints*  
 — *epidermidis*, Ach. *Trees*  
 — „ *var. analepta*, Ach. *Trees*  
 — *gemmata*, Ach. *Trees*  
 — *biformis*, Borr. „  
 — *hymenogonia*, Nyl. *Mortar*  
 — *mauroides*, Schær. *Exposed flints*  
 — *nitida*, Weig. *Trees*  
 — „ *var. nitidella*, Flk. *Trees*

## FRESH-WATER ALGÆ

The fresh-water Algæ of Hampshire have been investigated by two experts, and the lists made by them are recorded, in the *Journal of Botany*, 1890, pp. 334–338, by John Roy, LL.D., and in the *Journal of the Royal Microscopical Society*, 1890, p. 1, by A. W. Bennett, M.A. These lists include 131 species, which belong to the following groups:—

*Cyanophyceæ*, 18 species.

*Chlorophyceæ*, 113 species.

A large proportion (70) of the *Chlorophyceæ* consist of *Desmidiaceæ*, the *Protococcoideæ* include 35, the *Confervoideæ* 5, and the *Udognoniaceæ* 3.

Of the *Diatomaceæ* recorded there are only two species.

## A HISTORY OF HAMPSHIRE

Of the *Desmidiaceæ* the following species were first found in Hampshire: *Docidium Farquharsoni*, Roy; *Cosmarium Turneri*, Roy; *Sphærozozma granulatum*, Roy and Bisset; and the following varieties—*Closterium striolatum*, Ehr.; *B. ornatum*, Roy; *Micrasterias denticulata*, Breb., var. *intermedium*, Benn.; *M. rotata*, Grev., var. *urnigera*, Benn.; *M. truncata*, Breb., var. *tridentata*, Benn.

*Rhizoclonium geminatum*, Benn. (*Cladophoraceæ*), and *Schizothrix anglica*, Benn. (*Oscillatoriaceæ*), were also first found in Hampshire. These species are illustrated and described in the above-mentioned papers. This list cannot be considered fully to represent the flora of the county, for the numerous rivers that run into the sea on its southern border, the pools and bogs in the New Forest, and the ditches and streamlets in the broad valleys at the foot of the North Downs, must certainly contain many more species. The writer has noticed the streams in the Forest full of *Batrachospermum*, a genus which is not mentioned in the above list, and the *Diatomaceæ*, which are poorly represented, and the *Vaucheriaceæ*, which are not represented at all therein, are sure to occur in abundance on the muddy shores and the less brackish upper reaches of the estuaries.

### MARINE ALGÆ<sup>1</sup>

The marine algæ have received rather more attention, especially in the Isle of Wight, but the more or less muddy landlocked shores, from Havant to Lymington, have been very little investigated. The algal flora stands as follows:—Out of about 750 species of British marine algæ at present known, only 214 species have been recorded as occurring in Hampshire. These include 7 *Cyanophyceæ*, 26 *Chlorophyceæ*, 58 *Phæophyceæ*, and 130 *Rhodophyceæ*.

The *Cyanophyceæ*, although few in number, include two species new to Britain, viz., *Glæocapsa crepidinum*, Thur., and *Brachytrichia balani*, Born. The first named has been found also in other counties, but the second, which was first detected by Mr. Geo. Masee, on a wooden post in the sea at Bournemouth, has only been found elsewhere in Britain on rocks at Swanage, by Mr. E. A. L. Batters. The other *Cyanophyceæ* are *Lyngbya majuscula*, Harv.; *Calothrix confervicola*, C. Ag.; and *Rivularia atra*, Roth., all common species. The *Chlorophyceæ* consist chiefly of the common species of the genera *Enteromorpha*, *Cladophora*, and *Chætomorpha*, and a single species of each of the genera *Bryopsis*, *Codium*, *Monostroma*, *Ulothrix*, and *Ulva*. The only rare plant of this group found in Hampshire is *Cladophora rectangularis*, which is recorded from Niton, in the Isle of Wight. The *Phæophyceæ* belong to a number of genera, and include the commonest species, with a few exceptions which

<sup>1</sup> In the following list the term, 'new to Britain,' implies that the species have been detected in Britain since the publication of Harvey's classical work, *Phycologia Britannica*, in 1852.



## BOTANY

are, *Elachista stellaris*, Aresch., f. *Chordæ*; *Halopteris filicina*, Kütz., f. *patens*, Harv.; *Castagnea Griffithsiana*, J. Ag.; *Bifurcaria tuberculata*, Decne. and Thur.; *Taonia atomaria*, J. Ag.; *Dictyopteris polypodioides*, Lamx.; *Padina pavonia*, Gaill., and *Sphacelaria plumigera*, Holmes. All these are southern species, occurring on the southern and western coasts. The locality given for *Bifurcaria* is the most eastern one recorded for the plant in Britain, so far as the writer is aware. One minute parasitic species new to Britain was recently detected growing at Totland Bay on *Chorda Filum*, by Mrs. E. M. Holmes, viz., *Streblonema aequale*, Oltm. The only other species new to Britain found in Hampshire is *Giraudia sphacelarioides*, Derb. et Sol., which is reported from Shanklin. Both of these, however, are known from other southern counties.

The *Rhodophyceæ* include more than half of the known British, and several of the rarer species, of which may be mentioned *Bonnemaisonia asparagoides*, C. Ag.; *Cordylecladia erecta*, J. Ag.; *Dasya arbuscula*, C. Ag.; *Gigartina acicularis*, Lamx.; *G. pistillata*, Stackh.; *Gracilaria compressa*, Grev.; *Meredithia* (*Kallymenia*) *microphylla*, J. Ag.; *Naccaria Wiggii*, Endl.; *Scinaia furcellata*, Bivona, all of which are recorded from the Isle of Wight, but not from the mainland. One of the new British species, *Harveyella pachyderma*, Holm. and Batt., discovered by Mr. Sturch, at Gosport, has not yet been found elsewhere in Britain; *Porphyra leucosticta*, Thur.; *Choreocolax Polysiphoniæ*, *Harveyella mirabilis*, and *Bonnemaisonia hamifera*, Hariot, which are also new to Britain, have also been found elsewhere in this country.

The most interesting records for the county are (1) *Gelidium cartilagineum*, J. Ag., a species abundant at the Cape of Good Hope, which is recorded by Dr. Withering as having been thrown up on the shore at Freshwater Bay, and (2) *Bonnemaisonia hamifera*, Har., which was found growing on rocks at low water at Shanklin, by Mr. E. George, in 1897, having only been found for the first time at Falmouth a few months previously by Mr. T. H. Buffham, who collected three small pieces floating in with the tide. Since then the plant has been found in considerable abundance at Falmouth, by Mr. E. M. Holmes and Mr. E. George, some of the specimens occurring in a growing state in rock pools there, so that it would appear that this species, which elsewhere is only known to occur in Japan, has become naturalised in Hampshire and Cornwall. The branches of the plant give rise to small hooked branchlets, which grow so as to clasp tightly and encircle any other alga with which they come in contact, and then continue to grow.

Judging from the algal flora of the neighbouring counties, about 16 more genera of *Cyanophyceæ*, 13 of *Chlorophyceæ*, 18 of *Phæophyceæ*, and 22 of *Rhodophyceæ* may be expected to occur in Hampshire, so that there is here a fertile field for further exploration by algologists.

# A HISTORY OF HAMPSHIRE

## FUNGI

The number of the larger forms of fungi in Hampshire will compare very favourably, it is believed, with those found in other counties. There is variety of soils which favour their growth ; there are woodlands, downs, and undisturbed park-lands, and the New Forest—an exceptional locality only imperfectly explored at present. The fungus flora of any district depends for its productiveness so much upon the casualties of the season—upon temperature and moisture—that a long time is requisite before the fungi of any large district can be said to be even approximately ascertained. A list of fungi, more than 600 in number, is given in the *Proceedings of the Hants Field Club*. Two of our parks, Avington and the Grange, have produced several species that have taken their proper place in Mrs. Hussey's *Illustrations of British Mycology* and Dr. Cooke's *Illustrations of British Fungi*.

Travellers must often have observed in the autumn, when passing the neighbourhood of Aldershot, the abundance of *Amanita muscaria* under the fir trees and by the banks of the railroad. Indeed, where the soil is gravelly and where birch trees prevail, these pretty fungi, with their scarlet tops, may generally be seen.

The county has some fungi which, if not peculiar to itself, are at least not often met with elsewhere ; for instance, on the Downs between Alresford and Micheldever is *Sepultaria coronaria*, somewhat like a tennis ball in size and outward appearance, but after the opening of the apex it is found to be lined inside with a most beautiful violet tint. *Agaricus strobiliformis*, with peculiar shaped warts on the cap, not unlike the marks on a fir cone, is very common and is edible.

*Cortinarius russus*, *Lepiota badhami*, *Tricholoma spermaticus*, *Armillaria constrictus*, *Lactarius porphyrosporus*, and *L. controversa*, with *Boletus satanas* favour the northern part of the county, while *Cortinarius orichalceus*, *C. alboviolaceus*, and *C. sanguineus* are not uncommon in the Forest. The county has produced within the last few years the first specimens discovered in the United Kingdom of *Cortinarius triformis*, *C. subnotatus*, *C. azureus*, *C. injucundus*, *C. riculatus*, *C. argutus*, *Leptonia anatina*, *Collybia fodiens*, and *Coprinus stellaris*. *Clitocybe zygophyllus* and *Schulzeria Eyrei*, from the neighbourhood of the Grange Park, are entirely new to science. The last named is a very interesting species, and is one of a small group of three or four peculiar throughout the world as having pale blue or green spores.

*Sparassis crispa*, a species of the *Clavaria* group, sometimes as large and not altogether unlike a cauliflower, is one of the rarer kinds. We have found it in North Hants only in one spot, and more abundantly in the New Forest ; when seen for the first time it has certainly an astonishing appearance. The Morel (*Morchella esculenta*), seems to be a rare species ; only one specimen has been seen. This was forwarded to the writer this year from Wootten, near Basingstoke.

*Peziza coccinea*, with scarlet interior lining and a cup-shaped white



## BOTANY

exterior, known as 'red caps,' is very lovely ; it is often found growing on sticks surrounded by fresh green moss at the bottom of brown dead wood hedges in the time of spring. 'Fairy loaves' (*Geaster*) are common enough throughout the woods and copses.

A peculiarity of a few of the larger fungi (e.g. *Agaricus melleus*) is their emission of a phosphorescent light.

*Polyporus betulinus* abundant on the trunks of decaying birch trees, is still, in the cottages of Hampshire as in the peasants' homes in Sweden, used as an economical razor strop.

In North Hants the Truffle (*Tuber æstivum*) is common, and found pretty much in any sort of soil. There is a widespread impression that chalk soil and a beech tree, if they occur together, are certain to produce truffles. This impression does not seem to be at all correct, for in the county lying to the north of Winchester, enquiry proves that strong tenacious clay is no less favourable than the lighter soils. Under oaks, beeches, firs, or in what are called mixed woods, the truffle may be found. For truffle-hunting a small, rough, curly-haired poodle is used, and his vocation may be said to end about his eighth year.

### A LIST OF FUNGI FOUND IN HAMPSHIRE

*The \* indicates New Forest. Absent apparently from the Northern part of the County about Grange Park, near Alresford.*

The arrangement and nomenclature chiefly *British Fungus Flora*, Massee.

GASTROMYCETES		
Rhizopogon rubescens *	Clavaria muscoides	Hymenochæte tabacina
Scleroderma vulgare	— cinerea	Corticium sebaceum
Cyathus striatus	— cristata	— lacteum
Crucibulum vulgare	— aurea	— læve
Sphærobolus stellatus	— [rufescens, Schæff.*]	— nudum
Lycoperdon echinatum	— abietina	— arachnoideum
— saccatum	— flaccida *	— roseolum
— gemmatum	— fusiformis	— molle
— pyriforme	— inæqualis	— polygonium
— plumbeum	— fragilis	— cæruleum
— pusillum	— fumosa	— sanguineum *
Geaster fornicatus	— vermicularis	— comedens
Ithyphallus impudicus	— pistillaris	Stereum purpureum
Mutinus caninus	— ardenia	— ochroleucum
	Coniophora olivacea	— multizonatum
	— sulphurea	— hirsutum
	— arida	— sanguinolentum
	— membranacea	— spadiceum
	— cinnamomea	Craterellus cornucopioides
	Thelephora laciniata	Cyphella capula
	Sopptiella sebacea	— muscicola
	Peniophora quercina	Hydnum repandum
	— gigantea	— [Queletii *]
	— rosea	— nigrum
	— incarnata	— auriscalpium
	— cinerea	— cyathiforme
	— velutina	— erinaceum
	— phyllophila	— farinaceum
	Hymenochæte rubiginosa	— argutum
HYMENOMYCETES		
Auricularia mesenterica		
Exidia glandulosa		
— recisa		
Tremella mesenterica		
— intumescens		
Tremellodon gelatinosum *		
Calocera viscosa		
— cornea		
Sparassis crispa		
Clavaria amethystina		
— fastigiata		

# A HISTORY OF HAMPSHIRE

<i>Irpex obliquus</i>	<i>Boletus aereus</i>	<i>Hypholoma epixanthus</i>
<i>Radulum orbiculare</i>	— <i>badius</i>	— <i>fascicularis</i>
— <i>quercinum</i>	— <i>piperatus</i>	— <i>hypoxanthus</i>
<i>Phlebia radiata</i>	— <i>bovinus</i> *	— <i>lachrymabundus</i>
<i>Grandinia crustosa</i>	— <i>granulatus</i>	— <i>velutinus</i>
— <i>granulosa</i>	— <i>tenuipes</i>	— <i>pyrotrichus</i>
<i>Odontia fimbriata</i>	— <i>pachypus</i>	— <i>appendiculatus</i>
	var. <i>candicans</i>	— <i>leucotephrum</i>
	— <i>edulis</i>	— <i>hydrophilus</i>
	— <i>calopus</i>	<i>Stropharia æruginea</i>
	— <i>satanas</i>	— <i>albo-cyanea</i>
	— <i>luridus</i>	— <i>inuncta</i>
	var. <i>erythropus</i>	— <i>melasperma</i>
	— <i>purpureus</i>	— <i>squamosa</i>
	— <i>laricinus</i>	var. <i>aurantiaca</i>
	— <i>scaber</i>	— <i>merdaria</i>
	— <i>porphyrosporus</i>	— <i>stercoraria</i>
	<i>Coprinus comatus</i>	— <i>semiglobata</i>
	— <i>atramentarius</i>	<i>Agaricus campestris</i>
	— <i>picaceus</i>	var. <i>silvicola</i>
	— <i>fimetarius</i>	— <i>arvensis</i>
	— <i>niveus</i>	— <i>silvaticus</i>
	— <i>micaceus</i>	— <i>hæmorrhoidarius</i>
	— <i>papillatus</i>	<i>Paxillus panæolus</i>
	— <i>deliquescens</i>	— <i>involutus</i>
	— <i>lagopus</i>	— <i>atro-tomentosus</i>
	— <i>macrocephalus</i>	
	— <i>radiatus</i>	
	— [ <i>stellaris</i> ]	
	— <i>ephemerus</i>	
	— <i>plicatilis</i>	
	<i>Anellaria fimiputris</i>	
	— <i>separata</i>	
	<i>Panæolus phalænarum</i>	
	— <i>papilionaceus</i>	
	— <i>campanulatus</i>	
	— <i>fimicola</i>	
	<i>Psathyrella hiascens</i>	
	— <i>disseminatus</i>	
	<i>Gomphidius glutinosus</i>	
	— <i>roseus</i> *	
	— <i>viscidus</i>	
	— <i>gracilis</i>	
	<i>Psathyra corrugis</i>	
	— <i>obtusata</i>	
	— <i>bifrons</i>	
	— <i>semivestitus</i>	
	— <i>fatuus</i>	
	<i>Psilocybe sarcocephala</i>	
	— <i>ericæa</i> *	
	— <i>udus</i> *	
	— <i>bullacea</i>	
	— <i>semilanceata</i>	
	— <i>spadicea</i>	
	var. <i>polycephalus</i>	
	— <i>cernua</i>	
	— <i>fœnisecii</i>	
	— <i>clivensis</i>	
	<i>Hypholoma sublateritius</i>	
	— <i>capnoides</i>	



## BOTANY

- Dermocybe caninus*  
 — *myrtilinus* \*  
 — *azureus*  
 — *albo-cyaneus*  
 — *anomalus*  
 — *lepidopus* \*  
 — *miltinus* \*  
 — *cinnabarinus* \*  
 — *sanguineus* \*  
 — *cinnamomeus*  
 — *orellanus* \*  
 — *subnotatus*  
 — *raphanoides*  
*Inoloma* [*argutus*]  
 — *albo-violaceus* \*  
 — *callisteus*  
 — *bolaris* \*  
*Myxaciium collinitus*  
 — *mucifluus*  
 — *livido-ochraceus*  
 — *elator*  
 — *delibutus*  
*Phlegmacium triumphans*  
 — *varius*  
 — *cyanopus*  
 — *largus*  
 — *russus*  
 — *anfractus*  
 — *multiformis*  
     *var. flavescens*  
 — *talus*  
 — *calochrous*  
 — *cærulescens*  
 — *purpurascens*  
 — *fulgens*  
 — *orichalceus* \*  
 — *decoloratus*  
*Crepidotus mollis*  
*Tubaria furfuracea*  
 — *inquilina*  
*Flammula carbonaria*  
 — *flavida*  
 — *picrea*  
*Galera tenera*  
     *var. pilosella*  
 — *ovalis*  
 — *antipoda*  
 — *pygmeo-affinis*  
 — *rubiginosa*  
 — *hypnorum*  
*Naucoria cucumis*  
 — *anguineus* \*  
 — *melinoides*  
 — *striæpes*  
 — *semiorbicularis*  
 — *carpopbila*  
*Hebeloma mesophæum*  
 — *crustuliniforme*  
 — *testaceum*  
 — *lugens*
- Hebeloma petiginosum*  
*Inocybe lanuginosa*  
 — *incarnata*  
 — *dulcamara*  
 — *pyriodora*  
 — *scaber*  
 — *flocculosa*  
 — *carpta* \*  
 — *obscura*  
 — *echinata*  
 — *fastigiata*  
 — *hiulca*  
 — *rimosa*  
 — *asterospora*  
 — *lucifuga*  
 — *sinonia* \*  
 — *geophylla*  
*Bolbitius fragilis*  
 — *titubans*  
 — *tener*  
*Pluteolus reticulatis*  
 — *aleuriatus*  
*Pholiota erebia*  
 — *togularis*  
 — *præcox*  
 — *radicosa*  
 — *squarrosa*  
 — *spectabilis*  
 — *adiposa* \*  
 — *mutabilis*  
 — *marginata*  
 — *pumila*  
*Claudopus variabilis*  
 — *byssisedus*  
*Eccilia Parkensis*  
*Clitopilus prunulus*  
 — *orcella*  
 — *undatus*  
 — *vilis*  
*Leptonia anatina*  
 — *lampropoda*  
 — *serrulata*  
 — *chalybea*  
 — *incana*  
 — *formosa*  
 — *nefrens*  
*Nolanea pascua*  
 — *mammosa*  
 — *pisciodora*  
 — *rufo-carnea*  
*Entoloma sinuatum*  
 — *lividum*  
 — *Bloxami*  
 — *jubatum*  
 — *rhodopolium*  
 — *sericeum*  
 — *nidorosum*  
*Pluteus cervinus*  
 — *umbrosus*  
 — *hispidulus*
- Pluteus nanus*  
     *var. lutescens*  
 — *chrysophæus*  
 — *phlebophorus*  
*Volvaria gloiocephala*  
 — *media*  
 — *parvula*  
*Lenzites betulina*  
 — *sepiaria*  
*Panus stypticus*  
*Lentinus cochleatus*  
*Cantharellus cibarius*  
 — *aurantiacus*  
 — *tubæformis*  
 — *infundiliformis*  
 — *replexus*  
     *var. devexus*  
 — *retirugus*  
*Nyctalis parasitica*  
*Hygrophorus ceraceus*  
 — *coccineus*  
 — *miniatus*  
 — *turundus*  
 — *puniceus*  
 — *conicus*  
 — *calyptræformis*  
 — *psittacinus*  
 — *unguinosis*  
 — *pratensis*  
 — *virgineus*  
 — *niveus*  
 — *Clarkii*  
 — *ovinus*  
 — *chrysodon*  
 — *eburneus*  
 — *cossus*  
 — *glutifer*  
 — *arbustivus*  
 — *discoideus*  
 — *limacinus*  
 — *olivaceo-albus*  
 — *hypothejus*  
 — *mesotephrus*  
*Pleurotus ostreatus*  
 — *salignus*  
 — *reniformis*  
 — *septicus*  
 — *algidus*  
 — *striatulus*  
 — *chioneus*  
*Omphalia pyxidata*  
 — *striæpileus*  
 — *pseudo-androsacea*  
 — *grisea*  
 — *fibula*  
     *var. Swartzii*  
*Clitocybe nebularis*  
 — *clavipes* \*  
 — *odora*  
 — *cerussata*

# A HISTORY OF HAMPSHIRE

- |                          |                        |                        |
|--------------------------|------------------------|------------------------|
| Clitocybe phyllophila    | Russula nigricans      | Collybia cirrhata      |
| — pithyophila            | — adusta               | — tuberosa             |
| — gallinacea             | — citrina              | — nitellina            |
| — ampla                  | — heterophylla         | — tenacella            |
| — fumosa                 | — azurea               | — dryophila            |
| — pergamena              | — virescens            | var. funicularis       |
| — opaca                  | — furcata              | — ocellatus            |
| — maxima                 | — lepida               | — inolens              |
| — infundibuliformis      | — xerampelina          | — ambusta              |
| — geotropa               | — vesca                | — murina               |
| — gilva                  | — depallens *          | Marasmius peronatus    |
| — inversus               | — cyanoxantha          | — porreus              |
| — flaccidus              | — fellea               | — oreades              |
| — catina                 | — drimeia *            | — fusco-purpureus      |
| — tuba                   | — ochroleuca           | — erythropus           |
| — ericetorum             | — foetens              | — foetidus             |
| — cyathiformis           | — consobrina           | — ramealis             |
| [var. cervinus, Hoffm.]  | var. sororia           | — rotula               |
| — obbata                 | „ intermedia           | — androsaceus          |
| — brumalis               | — sardonina            | — epiphyllus           |
| — orbiformis             | — emetica              | Tricholoma sejunctus * |
| — metachroa              | [var. fallax, Schæff.] | — spermaticum          |
| — zygomphyla             | — fragilis             | — acerbum              |
| — ditopa                 | var. violacea          | — flavo-brunneum       |
| — fragrans               | — Queletii             | — albo-brunneum        |
| Laccaria laccata         | var. purpurea, Gillet  | — stans                |
| Lactarius scrobiculatus  | — [cærulea, Kromb.]    | — rutilans             |
| — torminosus             | Mycena capillaris      | — vaccinum             |
| — controversus           | — corticola            | — imbricatum           |
| — pubescens              | — tenerrima            | — immundus             |
| — insulsus               | — stylobates           | — murinaceum           |
| — blennius               | — citrinella           | — terreus              |
| — uvidus                 | — vulgaris             | var. atro-squamosus    |
| — pyrogalus              | — clavicularis         | — saponaceus           |
| — acris                  | — epipterygia          | — cuneifolium          |
| — pergamenus             | — leucogala            | var. cinero-rimosus    |
| — piperatus              | — galopoda             | — sulphureum           |
| — vellereus              | — sanguinolenta        | — ionides              |
| [var. exsuccus, Smith]   | — iris                 | — carneum              |
| — deliciosus             | — alcalina             | — gambosum             |
| — pallidus               | — ammoniaca            | — pcs-capræ            |
| — quietus                | — galericulata         | — album                |
| — theiogalus             | — polygramma           | — personatum           |
| — cyathula *             | — lactea               | — nudum                |
| — rufus                  | — luteo-alba           | — cinerascens          |
| — glyciosmus             | — pura                 | — grammopodium         |
| — fuliginosus            | — aurantia-marginata   | — melaleucum           |
| — volemus. Basing Park,  | — elegans              | — humile               |
| near Tisted              | — pelianthinus         | — subpulverulentum     |
| — serifluus              | Collybia radicata      | — sordidus             |
| — mitissimus             | — longipes             | Armillaria constricta  |
| — subdulcis              | — platyphylla          | — mellea               |
| — cemicarius             | — semitalis            | — mucida               |
| Russula alutacea         | — fusipes              | Lepiota procera        |
| — integra                | — [fodiens, Kalch]     | var. rhacodes          |
| — lutea                  | — butyracea            | — mastoideus           |
| — nitida                 | — velutipes            | — acutesquamosa        |
| — aurata                 | — confluent            | — Badhami              |
| — chamæleontina          | — ingrata              | — clypeolaria          |
| var. incarnata of lactea | — conigena             | — metulæspora          |



## BOTANY

*Lepiota cristata*  
— *Vittadinii*  
— *holosericea*  
— *carcharias*  
— *granulosa*  
— *amianthina*  
— *polysticta*

*Lepiota Bucknalli*  
— *lenticularis*  
[*Schulzeria*] *Eyrei*  
*Amanitopsis vaginata*  
— *strangulata*  
*Amanita phalloides*  
— *mappa*

*Amanita pantherina*  
— *muscaria*  
— *strobiliformis*  
— *rubescens*  
— *spissa*





# ZOOLOGY

## MARINE ZOOLOGY

THERE is no county shore line, however barren and uninviting it may seem, which can fail to yield matter of interest for every thoughtful and observant person. Particularly attractive then should be the study of the marine zoology of a county like Hampshire, which exhibits so great a diversity in the character of its shores and waters, from the sands of Bournemouth to the cliffs of Culver, and from the estuarine waters of Southampton to the salt waves of the open sea.

Yet fortunately for future naturalists the marine fauna of Hampshire waters has hitherto been imperfectly studied from the point of view of distribution and its causes, and this field for investigation is almost untouched. In the present summary nothing but the bare outlines of its principal features can be attempted to any profitable end.

The marine area may be appropriately divided into three principal regions : (1) The sea front, from Poole Harbour to Hurst Point on the mainland, and from the Needles to Ryde in the Isle of Wight, (2) the protected channel of the Solent and Spithead, and (3) the estuary formed by Southampton Water and its communications with the rivers Test, Itchen and Hamble.

The principal differences between these regions are in the degree of salinity of the water, the range of temperature variation, the nature and depth of the sea-bottom, and the degree of exposure to storms and tidal scour.

The open sea is characterised by a greater uniformity of temperature and salinity than the shallower estuarine waters. The mean temperature for the year is practically the same along the whole Channel coast from Start Point to the Straits of Dover, and has been determined by Mr. Dickson to be very slightly in excess of 52 Fahr. In fact a line drawn from Start Point to the Cherbourg peninsula divides the English Channel into two regions, characterised by differences of temperature, depth and fauna. The warmer waters to the west of this line contain such southern forms as the starfish *Asterias glacialis*, a large black holothurian or sea cucumber *Holothuria nigra* on the English coast, and the ear-shell *Haliotis* on the French shores, while the same temperature boundary limits the migrations of the pilchard ; but eastward of this

## A HISTORY OF HAMPSHIRE

line the forms just mentioned, together with many others, are entirely absent.

The average monthly range of temperature, as observed at the Owers light-vessel, which is moored in 16 fathoms of water off Selsea Bill, is as follows :—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
44·7	43·5	43·5	45·7	50·2	55·7	60·2	62·0	61·2	57·3	52·8	48·1

In the estuaries however, these limits are considerably exceeded, the temperature rising higher in summer and falling lower in winter. Thus, when passing down Southampton Water on a summer day, the temperature of the water is found to fall continuously until the open sea is reached ; whereas in midwinter the temperature would on the contrary be found to rise.

The salinity of the open sea is practically constant but is greatly reduced in estuarine waters by the influence of freshwater coming down the rivers. From the isolated observations available the specific gravity may be approximately placed at 1·020 off Southampton pier, 1·025 off Netley, and 1·027 off Spithead ; but the figures for the estuarine stations fluctuate considerably according to the state of the tide.

The effect of differences of this character upon the distribution of marine animals may be judged from the following comparison of the contents of two hauls made in June with a fine muslin net, at the same time, off Netley and Spithead respectively :—

	Netley.	Spithead.
Ciliated Infusoria ( <i>Tintinnus</i> ) . . . . .	CC	—
Rotifers . . . . .	C	—
Hydroid Medusæ ( <i>Phialidium</i> ). . . . .	—	C
Ctenophores ( <i>Hormiphora</i> ) . . . . .	C	C
Larvæ of Crabs and Sea-Worms . . . . .	Few	C
Larvæ of Oysters and other Molluscs . . . . .	CC	Few
Copepod Crustacea—		
<i>Centropages hamatus</i> . . . . .	C	Few
<i>Temora longicornis</i> . . . . .	Few	Few
<i>Acartia clausi</i> . . . . .	—	C
<i>Acartia discaudata</i> . . . . .	C	—
Harpacticids . . . . .	C	Fair no.
Appendicularians ( <i>Oikopleura</i> ) . . . . .	—	C

(C=Common. CC= Very common.)

It will be seen from the above list that well-known brackish or estuarine forms, such as *Tintinnus*, rotifers, and oyster larvæ, though common in the Netley haul, were absent from that taken off Spithead between Ryde and Stokes Bay ; whereas other well-known open-sea (or pelagic) forms were more common in the latter haul, though absent or rare in the former—*e.g.* hydroid medusæ and appendicularians. The most interesting contrast, however, is shown by the two species of the copepod genus *Acartia*, one of which is restricted to more or less brackish waters, while the other is a common inhabitant of the open sea.

The nature of the sea-bed profoundly affects the distribution of the



## MARINE ZOOLOGY

more sedentary forms of life, but from the imperfection of the local records it is impossible to summarise the differences in Hampshire waters with any degree of fulness. Southampton Water throughout has a bottom of mud on which an abundant vegetation of fine confervoid algæ thrives. The Solent and Spithead are for the most part swept relatively free from mud by the tidal streams ; but owing to the general set of the drift-currents, and to the protection afforded on the Portsmouth side by the Isle of Wight, there is a greater admixture of mud to the eastward than to the westward of the island. The bottom in the protected channels consists mostly of sand and broken shells. The seaward front shows fine clean sands inshore, graduating into a gravelly or shelly bottom in the deeper water, interrupted by shingle banks to the lee of the headlands and by naked rock off the Ventnor heights. At various points round the Isle of Wight beds of stiff blue clay are also found.

As regards depth, the whole area within lines drawn from Christchurch Point to the Needles, and from Bembridge Point to Selsea Bill, has less than 10 fathoms of water, if we except the two narrow channels excavated by the tides off Hurst Point and at the entrance to Spithead. The former is mainly from 20 to 33 fathoms deep ; the latter, between the island forts on No Man's Land and Horse and Dean Sands, attains a depth of 16 or 17 fathoms. Extensive banks of sand and mud, covered by water from 1 to 3 fathoms deep, are found at the mouth of Southampton Water, off Southsea and Hayling Island and along the north-eastern shore of the Isle of Wight.

Owing to the loose nature of the bottom the fauna in general appears to present an exceptional preponderance of burrowing and creeping forms, and a relative dearth of those types which require a firm foothold for permanent fixation or rocky crevices for protection. The following are the principal burrowing forms known to occur in the district : The dragonet (*Callionymus lyra*) among fishes, together with the various flat-fishes—soles, plaice, and dabs ; the purple-heart urchin (*Spatangus purpureus*) and the holothurian *Synapta inbærens* among echinoderms ; the crabs *Carcinus mænas*, *Portunus depurator* (mud), and *Pirimela denticulata* (shell-sand), the shrimps *Crangon vulgaris* and *C. sculptus* (sand), *Nebalia bipes* (black muddy sand), and the amphipod *Corophium longicorne* (mud) among crustacea ; the great majority of the bivalved Pelecypoda (sand) and the slug-like *Philine aperta* and *Utriculus obtusus* (mud) among molluscs ; *Phyllodoce maculata* and the sea-mouse (*Aphrodite aculeata*), in muddy sand, among Annelids.

The inshore areas also harbour a large variety of estuarine and mud-loving forms, the study of whose ways of life would well repay investigation. The same conditions have also led to the formation in various parts of extensive beds of sea-grass (*Zostera*), in which a rich fauna is always to be found. It is in such beds of green vegetation that some of the best illustrations of protective colouration among marine animals occur. Green pipe fishes (*Siphonostoma typhle*) hold themselves

## A HISTORY OF HAMPSHIRE

upright among the waving blades, and cautiously stalk their unconscious prey ; and green wrasses dart furtively about in quest of prawns of various kinds, some of which (e.g. *Virbius varians*) deceive their enemies by assuming the same bright livery.

On the other hand, the region appears to be somewhat deficient in sponges, in the larger kinds of hydroid zoophytes (e.g. *Antennularia antennina* and *A. ramosa*, *Tubularia indivisa*), in compound ascidians of the *Morchellium* type, and similar sessile animals, as well as in lobsters, edible crabs, the gastropod *Calliostoma zizyphinus*, and other rock-haunting forms ; though undue weight should not be attached to this opinion, which is based upon a very limited array of evidence.

Nevertheless the fisheries prosecuted from the Hampshire ports give similar indications as to the influence of the physical conditions characteristic of the region. About three dozen sailing vessels are engaged in inshore trawling for soles, plaice, dabs and rays ; eel-spearing is carried on from Emsworth and Southampton ; there is a considerable fishery for shrimps and prawns, and a large number of hands are engaged in dredging for oysters and scallops, and in cockle-picking from the muddy sand-flats of the Portsmouth and Emsworth district. But line-fishing is restricted to a few rowing-boats which work off Hamble river, and the supplies of crabs, lobsters and crayfish are principally obtained from France, Ireland and the West of England.

The subjoined lists include practically all the marine species in the different groups which are at present known to occur within Hampshire waters, but there can be no doubt that these lists are deficient in many respects. In the case of certain groups (non-calcareous sponges, flat-worms and chætopod annelids), the few records are so inadequate that it has seemed preferable to omit them altogether.

From the lists here published it will be apparent that the species which, from their rarity elsewhere, are most characteristic of the neighbourhood, or which possess some special interest for other reasons, are the following : the hydroids *Ophiodes mirabilis* and *Plumularia obliqua* ; the medusa *Turris neglecta* ; the anemone *Bunodes ballii* ; the polyzoans *Beania mirabilis* and *Notamia bursaria* ; the molluscs *Acanthochites discrepans*, *Paludinella littorina*, *Acera bullata*, *Leuconia bidentata* and *Pharus legumen* ; and the crustaceans *Nebalia bipes*, *Squilla desmarestii*, *Athanas nitescens* and *Pirimela denticulata*.

## PORIFERA

### *Sponges*

The calcareous sponges *Grantia ciliata* and *compressa* both occur at St. Helen's, Isle of Wight, and doubtless in many other localities between tide-marks. Siliceous sponges also occur, but none except the common *Halicbondria panicea* have been recorded.



# MARINE ZOOLOGY

## CŒLENTERA

*Jelly Fishes, Sea Anemones, etc.*

### I. HYDROZOA. *Hydroid Zoophytes*

(Nomenclature : Hincks, *British Hydroid Zoophytes*, 1868)

1. *Hydractinia echinata*, Fleming.

Incrusting the shells of gastropod molluscs (esp. *Buccinum* and *Natica*) tenanted by hermit crabs. Common. St. Helen's, Isle of Wight.

2. *Podocoryne carnea*, Sars.

Incrusting the shells of gastropod molluscs (esp. *Nassa reticulata*) tenanted by hermit crabs. Swanage Bay (T. Hincks).

3. *Coryne pusilla*, Gaertner.

St. Helen's, Isle of Wight.

4. *Eudendrium insigne*, Hincks.

Recorded from Swanage (T. H.).

5. *Obelia geniculata*, Linn.

Zostera bed. St. Helen's, Isle of Wight.

6. *Campanularia exigua*, Sars.

On other zoophytes. The nearest recorded locality is Swanage (T. H.).

7. *Campanularia raridentata*, Alder.

A minute species,  $\frac{1}{20}$  inch in height, growing on other zoophytes. Common in 5-7 fathoms in Swanage Bay (T. H.).

8. *Ophiodes mirabilis*, Hincks.

A minute but remarkably interesting form, especially from its possession of special defensive polyps comparable to the 'spiral zooids' of *Hydractinia*. On weed dredged in shallow water (5-8 fathoms) in Swanage Bay (T. H.).

9. *Sertularella gayi*, Lamx.

Deep water only. Isle of Wight (Solander).

10. *Diphasia attenuata*, Hincks.

Generally on other zoophytes. Common in Swanage Bay (T. H.).

11. *Sertularia pumila*, Linn.

On *Fucus serratus*, abundant between tide marks everywhere. Phosphorescent. St. Helen's, Isle of Wight.

12. *Sertularia gracilis*, Hassall.

Resembling *S. pumila*, but smaller and more delicate, light-coloured and perfectly transparent. On algæ and zoophytes. Abundant on *Hydrallmania falcata* in Swanage Bay (T. H.).

## A HISTORY OF HAMPSHIRE

13. *Hydrallmania falcata*, Linn.

On shells and stones in moderate depths. Common everywhere. Swanage (T. H.).

14. *Aglaophenia pennatula*, Ell. and Sol.

On shells and stems of large seaweeds, esp. *Laminaria digitata* and *Halidrys siliquosa*. Swanage Bay (T. H.).

15. *Plumularia obliqua*, Saunders.

Unique among British plumularians in having only a single nutritive polyp (hydranth) on each branch. On weeds and sponges near low-water mark. Particularly characteristic of the south-eastern coasts. Extremely common in Swanage Bay (T. H.).

### MEDUSÆ<sup>1</sup>

#### *Free-swimming Zoophytes*

(Nomenclature : Haeckel's *System der Medusen*)

1. *Turris neglecta*, Forbes.

Mitre-shaped, higher than broad, conically pointed above. Marginal tentacles short and numerous, 40 to 80. Stomach region and basal bulbs of the tentacles purplish or red. The eggs develop into a *Clava*-like zoophyte, which has never yet been discovered in the sea. Solent and the south coast of the Isle of Wight, where it was first discovered. Common in August or September (Forbes).

2. *Amphinema titania*, Gosse.

Umbrella highly arched, spherical, twice as high as broad, with a sharp conical tapering apex. Marginal tentacles two only, placed opposite one another, usually of a purplish tint. The nearest recorded locality is Portland (Forbes).

3. *Obelia lucifera*, Forbes.

Umbrella perfectly flat and disc-shaped, tentacles 24 at first, increasing to 80, 96, and even 114. Colourless, translucent, brilliantly phosphorescent. This is the medusa of the hydroid *Obelia geniculata* recorded above, from which there is no difficulty in obtaining it in the summer months. Common.

4. *Phialidium buskianum*, Gosse.

Hemispherical, translucent, colourless. Tentacles about 16 to 32. Spithead in June.

5. *Geryonia (Liriantha) appendiculata*, Forbes.

Umbrella hemispherical, manubrium as long as the breadth of the umbrella; tentacles eight in number, viz., four tapering marginal

<sup>1</sup> This list is manifestly fragmentary. The first four types are small medusæ, the adult free-swimming stages of Hydroid Zoophytes; the last two belong to the oceanic Trachomedusæ and the littoral Scyphomedusæ respectively.



## MARINE ZOOLOGY

tentacles, longer than the breadth of the umbrella, and four short solid tentacles alternating with the preceding and directed upwards over the umbrella. This species is a summer immigrant only from the more open waters of the Channel. It is recorded from Portland and probably reaches the Isle of Wight in certain years.

### 6. *Aurelia aurita*, Linn.

The common jellyfish of Southampton Water. Forbes remarks that the specimens which are so abundant in this estuary differ in size, colour and proportions from the normal *Aurelia aurita* from less confined localities, and do not attain one fourth of the normal dimensions. He says that the margin and arms are fringed with white tentacles, so that when the animal is seen in the water it appears as if conspicuously marked by a white cross, as well as by the four horse-shoe shaped streaks of pale purple caused by the ovaries. He therefore proposed to refer the Southampton variety to the *Medusa campanula* of Fabricius, instead of to the species more commonly known. The question requires re-examination ; but it appears probable that the differences relied upon by Forbes are not of a permanent or exclusive character. The small size (if confirmed) may be due to parasitic amphipods (*Hyperia galba*) as suggested by Romanes in a similar case occurring in Scotland, or to the waters of the estuary having possibly a more brackish character than in other harbours. The white streaks on the oral arms appear to be more probably due to the presence of embryos, which, as shown by Professor Minchin, are carried about by the medusæ in this position after being shed from the ovaries.

As is well known, these medusæ are only to be met with in the summer months. They are as truly 'annuals' as the flowers of country lanes. They are first to be taken in the spring of the year (March) in fine muslin nets, but at this time of the year do not exceed the size of a threepenny-piece. They are distinguishable from the adults by their different shape, which is that of an eight-rayed star, or rather a double Maltese cross, instead of the circular disc characteristic of the adult. These little 'ephyræ' are produced by gemmation from a minute *Hydra*-like polyp, which forms extensive colonies on old oyster shells. In February or March these polyps split off from their bodies a pile of little discs, one after the other, which break loose, mount to the surface as ephyræ and rapidly grow up into the perfect medusæ.

## 2. CTENOPHORA

### *Hormiphora plumosa*, Sars.

Body ovoid, transparent, colourless,  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long, marked by eight longitudinal rows of minute ciliated paddles by which the creature swims ; from the fine striation of the paddles, any movement on their part produces a brilliant iridescence. Two long fringed tentacles, which can be withdrawn into pockets. Exceedingly abundant both in Southampton Water and Spithead.

# A HISTORY OF HAMPSHIRE

## 3. ANTHOZOA

### *Sea Anemones and Corals*

(Nomenclature : Gosse, *British Sea Anemones and Corals*, 1860)

1. *Actinoloba dianthus*, Ellis.

Five or six inches high when extended ; white or flesh-coloured ; crowned by a frilled disc of innumerable minute tentacles. Deep water only, or in sheltered places inshore. Recorded from Selsea and Weymouth.

2. *Sagartia bellis*, Ell. and Sol.

Popularly the 'daisy.' Surface of column studded with suckers, which affix fragments of shells and stones ; also pierced with loop-holes for the ejection of stinging threads. Disc slightly wavy at the margin, broader than the column, surrounded by six cycles of numerous short tentacles (up to 500). Colour of disc, dark brown or black, marked by radiating lines of a different colour, generally red. Firmly attached in crevices and holes of rocks, chiefly in tide-pools ; rare in muddy parts.

3. *Sagartia troglodytes*, Johnst.

Resembles the preceding species, but the disc is narrower and the tentacles longer and less numerous (up to 200), arranged in four or five cycles. Each tentacle is generally marked transversely at its base with a broad Roman B. Generally attached loosely to pebbles or shells deeply immersed in mud ; sometimes in hollows of rocks, etc. St. Helen's, Isle of Wight, attached to weeds in an old oyster bed (W.G.). Recorded also at Selsea.

4. *Sagartia viduata*, Müller.

Column greatly elongated ; tentacles about 200, in five rows, all slender and very flexible, characteristically marked with a dark line down each side. Loosely attached to stones or rocks between tide-marks, or on sandy bottoms in shallow water. Bournemouth (Rev. J. Guillemard).

5. *Sagartia parasitica*, Couch.

Column stout and cartilaginous, marked with longitudinal brownish stripes. Attached to shells of *Buccinum* tenanted by large hermit crabs (*Pagurus bernhardus*). [Not actually recorded.]

6. *Adamsia palliata*, Bohadsch.

Column exceedingly thin, low and flat ; white, marked with conspicuous purplish spots. Attached to shells of *Trochus* and *Scaphander* tenanted by the hermit crab *Pagurus prideauxii*. Common on muddy bottoms, but not yet recorded from Hampshire.



## MARINE ZOOLOGY

### 7. *Anthea cereus*, Ell. and Sol.

Column low and broad ; tentacles long and slender, always extended, and either bright green with lilac tips, or dull ash-grey. Large specimens of both varieties flourish in broad shallow pools among rocks ; small specimens of the grey variety are common on blades of *Zostera*. Ventnor (G. Gatehouse) ; St. Helen's, Isle of Wight, on *Zostera* beds, abundant.

### 8. *Actinia mesembryanthemum*, Ell. and Sol.

Column short, broad and smooth ; colour varying from red to olive-green ; large specimens often red with green spots. Attached to rocks everywhere between tide-marks. St. Helen's, Isle of Wight.

### 9. *Bunodes ballii*, Cocks.

Column low and broad, sides studded with vertical rows of tubercles, each having a crimson spot in the centre ; tentacles speckled with white, and curling upwards at the tips. Attached in crevices of rocks, on the undersides of stones, etc., between tide-marks. Ventnor (G. G.) ; St. Helen's, Isle of Wight, fairly common on stones and clay boulders on *Zostera* beds. Recorded also from Selsea.

## POLYZOA

### *Colonial Sea 'Ferns'*

(Nomenclature : Hincks, *British Marine Polyzoa*, 1880)

### 1. CHEILOSTOMATA

#### 1. *Aetea anguina*, Linn.

Common on the smaller red algæ, especially on the hairy forms such as *Dasya coccinea*, *Griffithsia equisetifolia* and *Sphacellaria scoparia*. The colonies consist of an adherent winding stolon, from which at intervals arise the white calcareous zoëcia, having tubular annulated stems and clavate extremities which are curiously bent. Isle of Wight (W. Thompson).

#### 2. *Aetea truncata*, Landsborough.

On algæ and shells. Zoëcia erect, extremities truncated. Recorded from Swanage.

#### 3. *Scrupocellaria reptans*, Linn.

On algæ, sponges, rocks, etc., especially between tide-marks. The colonies form stiff, ragged and decumbent sprays, each containing two rows of zoëcia alternately arranged. The latter have the membranous aperture oval, and guarded by three marginal spines on the outer side and one on the inner side, the whole being protected by a remarkable antler-like process which rises from the inner side. Avicularia and vibracula both present. The attaching tendrils terminate in circular discs upon smooth surfaces (rocks, large seaweeds), but in grapnel-like anchoring organs on sponges or fibrous surfaces. Phosphorescent. Common everywhere. St. Helen's, Isle of Wight.

## A HISTORY OF HAMPSHIRE

### 4. *Bicellaria ciliata*, Linn.

On algæ and especially on various zoophytes, from the tidal zone to moderate depths. Colonies pearly white, forming delicate feathery tufts; readily recognised by the enormous length of the marginal spines of the zoæcium, 4–7 on the upper margin, 1 centrally just below the aperture, and 1 or 2 dorsally. Swanage Bay (T. Hincks).

### 5. *Bugula turbinata*, Alder.

The spiral orange-coloured colonies of this species cannot be mistaken if observed. It has been recorded from Swanage Bay, on drift wood.

### 6. *Beania mirabilis*, Johnst.

On roots of *Laminaria*, on *Bugula* and other zoophytes, and on shells of bivalves and stones between tide-marks. Though easily overlooked, this species is by no means uncommon in the neighbourhood, being recorded from Eastbourne and Swanage (on *Laminaria*) as well as from the Isle of Wight.

It is particularly interesting from the singular form of the zoæcia—which are boat-shaped, with spines along the margins of the broad aperture—the large and peculiar ‘tendrils’ or ‘rootlets,’ and the size and beauty of the polyps when extended. Shanklin, Isle of Wight (H. Lee).

### 7. *Notamia bursaria*, Linn.

The ‘shepherd’s-purse coralline’ may be regarded as the most characteristic polyzoan of Hampshire waters. ‘It grows in exquisitely soft and feathery tufts of a pearly whiteness, formed of most delicate material and gracefully curled at the extremities’ (Hincks). The resemblance of the paired zoæcia to the pods of the common ‘shepherd’s purse’ renders the name of this species peculiarly appropriate.

In this respect it recalls the arrangement of the capsules in the hydroid *Sertularia pumila*, but is easily distinguished from the latter even in the dead condition, by the presence of two kinds of capsules in the colony, the large compressed pod-like zoæcia—from which the feeding polyps, each with its wreath of ciliated tentacles, emerge—and the small snapping polyps, or avicularia, whose tubular stems, shaped like short tobacco-pipes, rise in pairs immediately above each pair of zoæcia.

On algæ (esp. *Rytidhlaea pinastroides*), stones, shells, crustaceans, etc., in shallow water; abundant. Solent, in the dredge abundant (Dr. R. N. Wolfenden); St. Helen’s, Isle of Wight, on algæ.

### 8. *Membranipora catenularia*, Jameson.

On shells of molluscs, especially bivalves, in deep water. The zoæcia are linked together in linear series which frequently branch and anastomose, forming a delicate dendritic pattern over the shell incrusting; or the series may be massed together forming a continuous sheet. The face of the zoæcium is entirely membranous, with a smooth border devoid of spines. Isle of Wight (W. T.).



## MARINE ZOOLOGY

### 9. *Membranipora pilosa*, Linn.

On *Fucus*, *Rhodymenia* and other algæ between tide-marks, common. The colony forms a continuous sheet in which the zoœcia are radially disposed in lines two, three or four abreast. The face of each zoœcium shows an oval membranous area surrounded by numerous (4-12) marginal spines. The most abundant of all British polyzoa. Phosphorescent. Isle of Wight.

### 10. *Membranipora membranacea*, Linn.

On *Laminaria*, common. Forms large incrusting sheets. The zoœcia are mostly disposed in parallel lines; the membranous area occupies the whole face of the zoœcium and has a smooth margin (as in *M. catenularia*) but each zoœcium bears a pair of spines at its front angles. Phosphorescent.

### 11. *Schizoporella auriculata*, Hassall.

On shells and stones from shallow to deep water, common. Colonies spreading in subcircular patches of a bright red colour. Zoœcia rhomboid, papillated, bearing 2-4 marginal spines and a small avicularium behind the lower lip. Isle of Wight (Busk).

### 12. *Lepralia foliacea*, Ell. and Sol.

On shells and stones in deep water only. Colonies forming large masses of brittle plates, irregularly contorted and anastomosing; flesh-coloured or reddish when alive, brownish when dead. West coast of Isle of Wight on oysters (Ellis).

### 13. *Mucronella ventricosa*, Hassall.

On stones, shells and sometimes seaweeds, from shallow to deep water. Colonies of a greyish-white colour, often glistening, forming large crusts. Zoœcia rhomboid or ovate, surface granular; marginal spines usually 4, sometimes 5. St. Helen's, Isle of Wight.

## 2. CYCLOSTOMATA

### 14. *Crisia cornuta*, Linn.

On algæ, zoophytes, surface of rocks, shells, etc., from tide-marks to deep water. Colonies more or less dendritic, very slender, jointed, consisting of a number of white calcareous tubular zoœcia arranged in a single series. St. Helen's, Isle of Wight, between tide-marks.

## 3. CTENOSTOMATA

### 15. *Alcyonidium hirsutum*, Fleming.

On algæ between tide-marks and in shallow water. The colonies form tough gelatinous masses, 5 or 6 inches high, irregularly digitated, and of a yellowish brown colour. The surface is roughened by large

## A HISTORY OF HAMPSHIRE

numbers of tall conical papillæ. Abundant on the stems of seaweeds in *Zostera* beds, St. Helen's, Isle of Wight.

The larger smoother and softer species *gelatinosum* may also occur, but is not recorded.

16. *Alcyonidium mytili*, Dalyell.

On shells of *Trochidæ* and other shells, stones, tests of ascidians, *Fucus*, etc., from tide-marks to deep water. Colonies incrusting, thin or fleshy, of a dingy white or yellowish colour; surface fairly smooth, mapped out into hexagonal areas corresponding to the zoæcia. On tests of ascidians, St. Helen's, Isle of Wight.

17. *Amathia lendigera*, Linn.

On fuci, especially *Halidrys siliquosa*, and on zoophytes. The colonies form dense tangled masses of slender flexile stems, dichotomously branched; zoæcia cylindrical, in two parallel rows, disposed in small isolated groups immediately below each fork of the branches. St. Helen's, Isle of Wight, on drifted *Halidrys*.

18. *Bowerbankia pustulosa*, Ell. and Sol.

On fuci, etc., in shallow water. Colonies erect, forming tall arborescent tufts; zoæcia ovate, disposed at intervals in dense spiral clusters along the stem and branches. Isle of Wight (Ellis).

19. *Cylindracecium dilatatum*, Hincks.

On zoophytes, tests of ascidians, and shells, from shallow to deep water. Colonies consisting of an adherent stolon, which dilates at intervals into expansions from which arise the erect tubular zoæcia. On ascidians, *Zostera* bed, St. Helen's, Isle of Wight.

## ECHINODERMATA

*Star-fishes, etc.*

(Nomenclature: Bell, *British Museum Catalogue*, 1892)

1. *Asterias rubens*, Linn.

The common red 'cross-fish' or 'five-fingers.' Southampton Water.

2. *Solaster papposus*, Fabr.

The red sun star. Spithead.

3. *Palmipes placenta*, Penn.

This starfish is very thin and perfectly flat, pentagonal in outline. Deep water [Worthing, Weymouth].

4. *Henricia sanguinolenta*, Müller.

This starfish is easily characterised by the extremely small size of the central disc and the rigidity of its arms. Colour blood-red to yellow. Deep water usually [Worthing, Poole].



## MARINE ZOOLOGY

5. *Ophiotrix fragilis*, Müll.

The common brittle-star. Arms transversely banded with rose colour. Spithead.

6. *Amphiura elegans*, Leach.

The minute gray brittle-star. Arms rarely exceeding a length of half an inch. Under stones, and in coralline pools. St. Helen's, Isle of Wight.

7. *Echinus miliaris*, Linn.

The shallow-water urchin. Shell more or less depressed above and distinctly pentangular. Found in crevices or under large stones. Nearest record, Poole.

8. *Echinus esculentus*, Linn.

The common sea-urchin. Shell almost spherical. Offshore only, except after gales when it may be cast ashore. [Recorded from Poole in  $2\frac{1}{2}$  fathoms.]

9. *Spatangus purpureus*, Müll.

The purple heart urchin. Common on scallop-banks and trawling grounds [Brighton (Wolfenden) ; Weymouth (Pennant)].

10. *Cucumaria pentactes*, Fleming.

The common white angular sea-cucumber. Among clay boulders, St. Helen's, Isle of Wight.

11. *Synapta inhærens*, Müll.

The burrowing sea-cucumber. Skin covered with anchoring spicules which render it very adhesive ; white with small spots of reddish orange. St. Helen's, Isle of Wight, among clay boulders.

## TUNICATA

### *Sea-Squirts*

1. *Ascidrella scabra*, Müll.

Body compressed, orifices approximate ; tunic (or test) thick and transparent, moderately rough with blunt tubercles ; skin underneath blotched with broad red patches ; size under one inch. Attached by the base and part of one side to shells, zoophytes and seaweeds. Spithead, and St. Helen's, Isle of Wight.

2. *Ascidrella aspersa*, Müll.

Resembling *A. scabra*, but the test is largely covered with rough spinulated tubercles, the coloration is a dull gray, and the size attains 2, 3, or even 4 inches. Attached to shells or to *Fucus serratus* in estuarine waters. Southampton Water.

## A HISTORY OF HAMPSHIRE

3. *Ascidia prunum*, Müll. (?).

Body more or less inflated. Hampshire shore (F. W. Gamble).

4. *Ascidia mollis*, Ald. and Hanc.

Atrial aperture half-way down the dorsal side ; test very soft and smooth, and all over small red dots. Length 1 to 2 inches. Attached by the whole side. St. Helen's, Isle of Wight, on boulders.

5. *Ascidia mentula*, Müll.

Atrial aperture more than half way down, on a blunt prominence. Test smooth, thick. Attached by the base in deep water, or by the whole side to rocks between tide-marks. St. Helen's, Isle of Wight.

6. *Ascidia depressa*, (Ald.) Garst.

Length about one inch or possibly two ; body very flat, covered with microscopic tubercles ; colour dull green ; attached by the whole side. St. Helen's, under stones on *Zostera* bed.

7. *Ciona intestinalis*, Linn.

Erect, but contractile ; test very thin and transparent ; orifices prominent ; colour greenish. St. Helen's, on stones or clay boulders, occasionally ; on walls of a tidal milling pond, abundant. The variety *canina* is recorded from the Solent.

8. *Botryllus violaceus*, M. Edw.

Forming flat incrusting colonies of variously-coloured zooids in star-shaped clusters. Under stones, common. St. Helen's, on *Zostera* bed.

9. *Botrylloides rubrum*, M. Edw.

Like the preceding, but the zooids form linear branching series throughout the colony ; colour bright red. St. Helen's.

10. *Leptoclinum* and *Didemnum*.

Various species of these incrusting genera are abundant on the *Zostera* beds at St. Helen's.



# MOLLUSCS

## 1. MARINE

No list of the Marine Molluscan fauna of Hampshire and the Isle of Wight seems ever to have been published, in which respect this region is an exception to most of our coastal counties. This neglect, so far as the mainland is concerned, may be attributed to the uninviting nature of the coast-line, the muddy foreshores of the Solent not encouraging investigators; but the want of a record for the Isle of Wight is inexplicable.

Here, especially along the southern shores, all the commoner forms of the English Channel littoral fauna may certainly be looked for: whelks, periwinkles, limpets and mussels in abundance, whilst exceptionally fine examples of the dog-periwinkle (*Purpura lapillus*) are known to occur.

The following list of the recorded occurrences for the whole area in question has been compiled from scattered sources and from private information:—

## AMPHINEURA

*Trachydermon cinereus* (Linn.). St. Helen's, I. of W. Common on stones and clay boulders.

*Acanthochites discrepans* (Brown). This species has not hitherto been recorded east of Start Point in Devonshire. St. Helen's, *Zostera* bed.

## PELECYPODA

*Oysters, Mussels, etc.*

*Anomia ephippium*, L. St. Helen's, on *Zostera* bed.

*Mytilus edulis*, L. Common Mussel.

*Modiola barbata*, Lam. Bearded Mussel. Portsmouth; St. Helen's, *Zostera* bed.

*Modiolaria discors* (L.). Gregarious at the roots of seaweeds. Southampton.

*Ostrea edulis*, L. The Oyster.

*Chlamys varius* (L.).

*Loripes lacteus*, (Mont.). Muddy gravel and sand. Southampton (Jeffreys).

*Tellina balthica*, L.

*Syndosmya tenuis*, (Mont.).

## A HISTORY OF HAMPSHIRE

- Venus verrucosa*, L. In sandy gravel. St. Helen's.  
*Tapes aureus*, Gmel. In sandy gravel. St. Helen's, common.  
— *pullastra*, Mont. In muddy gravel or sand. St. Helen's, common.  
*Cardium exiguum*, Gmel. St. Helen's.  
— *edule*, L. Common Cockle.  
var. *rusticum*, Chemn. In salt-marshes, Hants.  
*Mya arenaria*, L. In estuaries.  
*Pharus legumen* (L.). Christchurch. Not recorded east of this locality.  
*Solen ensis*, L. Bembridge, I. of W.  
— *siliqua*, L. Priory Bay, St. Helen's.  
*Saxicava rugosa* (Linn.).  
*Pholas*, sp.? St. Helen's, I. of W., burrowing in clay boulders on  
*Zostera* beds, abundant.  
*Panopea plicata*, Mont. Ryde, I. of W., single valves only.  
*Pandora inæquivalvis* (L.).

## GASTROPODA

*Whelks, Winkles, etc.*

### 1. PROSOBRANCHIA

- Acmæa virginea* (Müll.). St. Helen's, I. of W.  
*Patella vulgata*, L. Common Limpet.  
*Gibbula cineraria* (L.). St. Helen's, common.  
— *magus*, L. St. Helen's, empty shells only, but common.  
*Calliostoma exasperatum* (Penn.), (doubtful record).  
— *miliaris* (Brocchi).  
*Odostomia rissoides*, Hanley, and *O. fenestrata*, Forbes.  
*Truncatella subcylindrica* (Linn.).  
*Barleeia rubra* (Mont.). Southampton (Montagu), but needs confirmation.  
*Rissoia inconspicua* (Ald.).  
— *membranacea* (Ad.).  
— *violacea* (Desm.).  
*Paludinella littorina* (Della Chiaje). Whitecliff Bay, I. of W.  
*Lacuna puteolus* (Turt.).  
— *divaricata* (Fabr.). St. Helen's, on *Zostera*, common.  
*Littorina rudis* (Donovan). St. Helen's, in mill pond, with *Paludestrina stagnalis* (Bast.).  
— *littorea* (L.). Common Periwinkle.  
— *obtusata* (L.) [= *L. littoralis* (Linn.)].  
*Lamellaria perspicua* (L.). St. Helen's. Extremely abundant on Compound Ascidians in *Zostera* bed, the various colours of which it mimics.  
*Purpura lapillus*, L.  
*Ocenebra erinacea* (L.). St. Helen's.  
*Nassa reticulata* (L.). St. Helen's.  
*Buccinum undatum*, Linn. The Whelk.



## MOLLUSCS

### 2. OPISTHOBRANCHIA

- Haminea bydati* (L.).  
*Acera bullata* (Mull.). Bembridge Harbour, I. of W., on mud flats.  
*Retusa obtusa* (Mont.). Solent.  
*Philina aperta*, L. Southampton Water and Spithead.  
*Pleurobranchus plumula* (Mont.). St. Helen's.  
*Doris tuberculata*, Cuv. On the sponge *Halichondria panicea*. Solent.  
*Acanthodoris pilosa* (Müll.). St. Helen's, on *Fucus* and other weeds.  
*Polycera lessonii*, Orb. St. Helen's, on green weeds.  
*Ancula cristata* (Ald.). St. Helen's.

## CEPHALOPODA

### *Cuttle-fishes*

- Sepiolo atlantica*, Orb. Spithead in trawl.  
*Loligo media*, L. Southampton Water, off Netley, in trawl.

When the Southampton Docks were extended in 1889, the following species were identified by Mr. T. W. Shore and J. W. Elwes, among specimens in the estuarine mud at the junction of the Itchen and Test.

- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| <i>Ostrea edulis</i> , Linn.          | <i>Nassa reticulata</i> (Linn.)     |
| <i>Chlamys varius</i> (Linn.)         | <i>Purpura lapillus</i> (Linn.)     |
| <i>Mytilus edulis</i> , Linn.         | <i>Odostomia unidentata</i> (Mont.) |
| <i>Modiolaria discors</i> (Linn.)     | <i>Chemnitzia</i> , sp.?            |
| <i>Nucula nucleus</i> (Linn.)         | <i>Rissoia membranacea</i> (Ad.)    |
| <i>Cardium edule</i> , Linn.          | — <i>striata</i> (Ad.)              |
| — <i>exiguum</i> , Gmel.              | — <i>albella</i> , Lovén            |
| <i>Loripes lacteus</i> (Mont.)        | <i>Littorina littorea</i> , Linn.   |
| <i>Lucina borealis</i> (Linn.)        | — <i>rudis</i> (Donovan)            |
| <i>Tapes decussata</i> (Linn.)        | — <i>obtusata</i> (Linn.)           |
| — <i>aureus</i> (Gmel.)               | <i>Lacuna puteolus</i> (Turton)     |
| <i>Tellina balthica</i> , Linn.       | — <i>divaricata</i> (Fabr.)         |
| <i>Scrobicularia piperata</i> (Gmel.) | <i>Phasianella pulla</i> (Linn.)    |
| <i>Syndosmya alba</i> , W. Wood       | <i>Gibbula cineraria</i> (Linn.)    |
| <i>Macra subtruncata</i> (Da C.)      | — <i>magus</i> (Linn.)              |
| <i>Ocenebra erinacea</i> (Linn.)      | <i>Haminea bydati</i> (Linn.)       |
| <i>Buccinum undatum</i> , Linn.       | <i>Retusa obtusa</i> , (Mont.)      |

### 2. NON-MARINE MOLLUSCA

The number of species recorded, so far, from the district is 105 out of 138 found in Britain, whilst five more have been obtained from alluvial deposits and most of these may yet be found living when more thorough search has been made for them.

The assemblage is specially interesting from its containing forms like *Helicella barbara*, which originally reached this country from the south-west, over regions now submerged, with others, which, like the well-marked *Helicodonta obvoluta*, came from the Continent to the south-east.

## A HISTORY OF HAMPSHIRE

The list is as follows :—

- Paludestrina confusa* (Frauenf.). Stone.  
 — *ventrosa* (Mont.). Southampton Dock : Stone.  
*Succinea oblonga*, Drap. Totlands and Freshwater bays.  
*Vertigo substriata*, Jeff. Test Valley.  
 — *pusilla* (Müll.). Test and Itchen valleys.  
*Pisidium amnicum* (Müll.).  
 — *pusillum* (Gmel).  
 — *fontinale* (Drap). The var. *benslowana* (Shepp.) occurs at Tuckton.  
 — *nitidum*, Jenyns. Three specimens from the Avon and Stour at Christchurch : North Hants : colony in a pond at Hambledon : St. Helen's, I. of Wight.  
 — *milium* (Held.). Hayling, rare : R. Stour, Christchurch : R. Avon, Winkton.  
*Sphærium rivicola* (Leach). Itchin, at Winchester.  
 — *corneum* (Linn).  
 — *lacustre* (Müll.). Preston Candover : Havant : I. of Wight.  
*Anodonta cygnea* (Linn.).  
*Unio tumidus*, Retz. Basingstoke Canal (in Hartley Institution Museum).  
*Neritina fluviatilis* (Linn.).  
*Pomatias elegans* (Müll.).  
*Valvata piscinalis* (Müll.).  
 — *cristata*, Müll.  
*Vivipara vivipara* (Linn.).  
 — *contecta* (Millet).  
*Bithynia tentaculata* (Linn.).  
 — *leachii* (Shepp.).  
*Paludestrina stagnalis* (Bast.).  
 — *jenkinsi* (Smith). Specimens labelled '*Hydrobia ferrusina*, Hampshire, Sowerby,' in the Jeffreys' collection at Washington, U.S., prove to be this species.  
*Physa fontinalis* (Linn.).  
 — *hypnorum* (Linn.).  
*Planorbis corneus* (Linn.).  
 — *nautileus* (Linn.).  
 — *albus*, Müll.  
 — *carinatus*, Müll.  
 — *marginatus*, Drap.  
 — *vortex* (Linn.).  
 — *spirorbis* (Linn.).  
 — *contortus* (Linn.).  
 — *fontanus* (Lightf.).  
*Limnæa auricularia* (Linn.).  
 — *pereger* (Müll.).  
 — *palustris* (Müll.).  
 — *truncatula* (Müll.).  
 — *glabra* (Müll.). Holmsley.  
 — *stagnalis* (Linn.).



## MOLLUSCS

- Velletia lacustris* (Linn.). Winchester : Hayling : Havant : in the Avon at Christchurch, where a white form alone is found.
- Ancylus fluviatilis*, Müll.
- Leuconia bidentata* (Mont.). Whitecliff Bay. 'Under stones between tide marks. Appears to feed on decaying seaweeds' (W. Garstang).
- Carychium minimum*, Müll.
- Succinea putris* (Linn.).
- *elegans*, Risso.
- Clausilia laminata* (Mont.).
- *bidentata* (Strom.).
- *rolphii*, Gray. Common in woods near Winchester : Petersfield : Finchdean abundant.
- Balea perversa* (Linn.).
- Vertigo minutissima* (Hartm.). Ventnor : subfossil in calcareous loam, I. of Wight.
- *antivertigo* (Drap.).
- *pygmæa* (Drap.).
- *moulinsiana* (Drap.). Near Bishopstoke.
- Sphyradium edentulum* (Drap.). Near Christchurch : Alverstton and Steep Hill, I. of Wight.
- Pupa secale*, Drap. Local, but not scarce in the I. of Wight.
- *cylindræa* (Da Costa).
- *muscorum* (Linn.).
- Cæcilianella acicula* (Müll.). Above chalk-pit, Afton Down, I. of Wight : also in alluvial deposits in the Test Valley, at Ventnor, and at Totlands Bay.
- Azeca tridens* (Pult.), var. *crystallina* (Drap.). Petersfield.
- Cochlicopa lubrica* (Müll.).
- Buliminus montanus* (Drap.). Selbourne : Buriton.
- *obscurus* (Müll.).
- Helix aspersa* (Müll.).
- *pomatia*, Linn. Petersfield, quoted by the late Wm. Jeffery from *Zoologist*, 1878. North Hants, rare.
- *nemoralis*, Linn. Besides the common varieties in colour and markings there are here and there in the south of the county colonies of the crimson banded form with pink lips.
- *bortensis*, Müll. This is rather more local in the county than the last species. On Hayling Island a remarkable form occurs, yellow with a black mouth, but with the characteristic dart of the species.
- Helicigona lapicida* (Linn.).
- *arbustorum* (Linn.).
- Helicodonta obvoluta* (Müll.). Crabbe Wood, Winchester : Ditcham Wood, near Buriton, Miscombe.
- Vallonia pulchella* (Müll.).
- Acanthinula aculeata* (Müll.). Winchester : Somerford : I. of Wight.
- Hygromia fusca* (Mont.). Two specimens have been reported from the New Forest, near Holmsley.

## A HISTORY OF HAMPSHIRE

*Hygromia granulata* (Alder). Preston, Candover, Winchester : ' Abundant close to River Avon, Christchurch : a few at Winkton, Ringwood ' : One specimen at Avingdon Park : Wroxhall, I. of Wight.

— *rufescens* (Penn.).

— *bispida* (Linn.).

*Helicella virgata* (Da Costa). Common. A reversed monstrosity has been found at Yarmouth, I. of Wight.

— *itala* (Linn.). Common. A reversed monstrosity has been taken at Havant.

— *caperata* (Mont.).

— *barbara* (Linn.). Freshwater Bay.

— *cantiana* (Mont.).

— *rupestris* (Drap.). Christchurch and Warblington, Southampton : Yaverland and Carisbrooke, I. of Wight.

*Pyramidula rotundata* (Müll.).

*Punctum pygmæum* (Drap.). Christchurch.

*Arion ater* (Linn.). Both black and rufous varieties.

— *bortensis* (Fér.). The variety known as *A. celticus*, Poll., has been recorded from Southampton.

— *circumscriptus* (Johnst.). Christchurch and Winchester.

— *intermedius* (Norm.). Woods near Winchester.

— *subfuscus* (Drap.). Christchurch and Southampton.

*Vitrea crystallina* (Müll.).

— *alliaria* (Müll.). Winchester : not frequent in Christchurch district : I. of Wight.

— *glabra* (Brit. auct.). Hayling and I. of Wight.

— *cellaria* (Müll.).

— *nitidula* (Drap.).

— *pura* (Alder). Isle of Wight.

— *radiatula* (Alder). Crabbe Wood, near Winchester.

— *excavata* (Bean). Numerous where it occurs, but very local : Chuton Glen, Hengistbury Head, Boscombe, Hoborne. At Roeshot Hill, near Christchurch, a variety with a transparent light yellow shell only occurs.

— *nitida* (Müll.). Langstone, and sides of ponds, Bonchurch to Ryde.

— *fulva* (Müll.). Winchester, and sparsely round Christchurch.

*Vitrina pellucida* (Müll.).

*Amalia sowerbii* (Fér.).

— *gagates* (Drap.), var. *plumbea* (Moq.). Christchurch : the type does not occur.

*Agriolimax agrestis* (Linn.).

— *lævis*, (Müll.). Christchurch.

*Limax maximus*, Linn.

— *flavus*, Linn.

— *arborum*, Bouch.-Chant. Christchurch.

*Testacella mangei*, Fér. Porchester.



# INSECTS<sup>1</sup>

## ORTHOPTERA

To the student of our few British species of Orthoptera, Hampshire is the most interesting county, for the majority of our known forms have been taken at one time or another within its borders; Kent, indeed, is its only possible rival. Thirty-six species are recorded in the following list, of which thirty may be fairly considered to be indigenous. The remaining six include the various exotic cockroaches which have been imported in merchandise, etc., and become established, and also one or two locusts that may be regarded as accidental stragglers to our shores. Almost all the rarer species have been captured in the county, and very probably further search will reveal the presence of such as are not yet included upon the list. One, the Wood Cricket, has been as yet found nowhere in Great Britain outside the New Forest; we may reasonably foretell that, when Orthoptera have been more carefully and diligently collected, such rarities as *Apterygida albipennis*, Meg., and *Platycleis roeselii*, Hagenb., may be discovered in Hampshire.

## FORFICULARIA

### *Earwigs*

*Labidura riparia*, Pall. This is the largest earwig that has been captured in Britain. It has been taken near the line of highwater mark near Christchurch, where the Rev. W. Bingley first found it ninety years ago. It has also been captured at Bonchurch, and at Hengistbury Head, and very likely is far less rare than generally supposed. It is a cosmopolitan species, and has been spread by shipping to nearly every quarter of the globe. It is a very variable insect, the colour ranging from a pale testaceous to a dark red, and the shape of the forceps also varies considerably. The Lesser Earwig (*Labia minor*, L.) is common throughout England in the early summer; it flies on warm, fine evenings in company with *Staphylinidæ*, and may be often taken on the wing over flower-beds, dung-heaps, etc. The Common Earwig (*Forficula auricularia*, L.), popularly known as 'earwiggle,' and in the North as 'twitch-bell' and 'furkin-robin,' is abundant everywhere. The forceps vary very considerably in length. *Forficula lesnei*, Finot. This species is much rarer than the Common Earwig, but is most probably more widely

<sup>1</sup> The sequence of the Orders here followed is that adopted by Dr. D. Sharp, M.A., F.R.S., in *The Cambridge Natural History*, vols. v., vi. (1895, 1899).—H. G.

## A HISTORY OF HAMPSHIRE

spread than generally supposed. Dale records it from Bonchurch. *F. decipiens*, mentioned by Dale, and *F. pubescens*, mentioned by Dale, Shaw, and Burr, are to be referred to this species.

### BLATTODEA

#### Cockroaches

*Ectobiidæ*. *Ectobia lapponica*, L. This species has been taken in the New Forest (Shaw). *Ectobia panzeri*, Steph. (= *ericetorum*, Wesm.). This little cockroach has been taken at Hayling Island by Mr. E. Saunders (Shaw), and by the writer; Stephens gives Lyndhurst as a locality, and at Christchurch, Mr. W. J. Lucas has taken it among refuse, almost at highwater mark. The variety *nigripes*, Steph., which has so far only been taken in Great Britain, is recorded by Stephens for the New Forest, and by Mr. Eland Shaw from Bournemouth. *Ectobia livida*, Fabr., seems to be rarer than either of the above. It has been taken in the New Forest (Stephens, Shaw), and at Bournemouth (Shaw).

*Phyllodromiidæ*. *Phyllodromia germanica*, L., is an imported species, which is very abundant in many hotels and restaurants. It is commonly known from its scientific name as the German Cockroach, though the Germans call it the 'Russian,' and the Russians call it the 'Prussian.' In some parts it is popularly known as 'The Shiner.'

*Periplanetidæ*. The Common Cockroach (*Blatta orientalis*, L.) is numerous in kitchens and cellars throughout the country. *Periplaneta australasiæ*, Fabr. The origin of this handsome cockroach is uncertain, some authorities suggesting Australia, others Central America, where it is abundant. In this country it has been taken in certain hothouses, among others at Bishop's Waltham (Lucas), and is now probably definitely established here.

### ACRIDIODEA

#### Grasshoppers

*Truxalidæ*. *Mecostethus grossus*, L. This fine grasshopper was a few years ago considered to be one of our rarest native insects, but has since been discovered in numbers in certain marshy localities. Mr. J. C. Dale captured it many years ago in the New Forest, and in 1896 Mr. W. M. Jeffreys of Lyndhurst took it in a bog near that town, since when it has been captured by several collectors in the same neighbourhood, and also near Brockenhurst (Lucas, King, Ashby). It is mentioned as *flavipes* by Gmelin, Donovan, and Stephens. *Stenobothrus lineatus*, Panz. This is an uncommon form, but several localities have been recorded, especially in the southern and south-eastern counties. It is to be found in the New Forest. *Stenobothrus viridulus*, L. One of the commonest of our Orthoptera. It occurs nearly everywhere in grassy places. *Stenobothrus rufipes*, Zett. This is less common than the above, but is by no means rare. It has been taken in the New Forest (Shaw, Thornley) and at Bournemouth (Burr). *Stenobothrus*



## INSECTS

*bicolor*, Charp. Very abundant throughout the country. *Stenobothrus elegans*, Charp. This is a local species, but widely distributed. It has been taken in the New Forest (Burr). *Stenobothrus parallelus*, Zett. This, with the possible exception of *St. bicolor*, is the most abundant species of Orthoptera that we have in Great Britain. *Gomphocerus sibiricus*, L. A single male of this species, the identity of which is undoubted, exists in the Hope Collection at Oxford, which is said by Stephens to have been taken on the downs near Netley. As it is purely an Alpine species, it is highly improbable that it should occur in the South of England. *Gomphocerus rufus*, L. This is by no means a common insect, but has been taken in the New Forest (Dale). *Gomphocerus maculatus*, Thunb. (= *biguttatus*, Charp et auctt.). This little grasshopper is extremely common on commons and sandy heaths throughout England. It has been taken at Linwood (Thornley) and Hayling Island (Burr).

*Ædipodidæ*. *Pachytylus danicus*, L. (= *cinerascens*, Fabr. et auctt. = *christii*, Curt. = *migratorius* auctt., nec Linn., nec Br.). This fine locust is almost certainly an accidental visitor from abroad. There are certain restricted spots in Belgium where it is resident, but in Great Britain it is not known to breed. It has been taken on more than one occasion in the New Forest. Mr. F. Bouskell possesses a specimen labelled 'N.F.,' and the '*Pachytylus migratorius*,' recently recorded from Brockenhurst by Mr. Simmons, is really *P. danicus*. *Ædipoda cærulescens*, L. Stewart mentions two captures of this pretty species at Southampton, but their occurrence must have been accidental.

*Tettigidæ*. *Tettix bipunctatus*, L. Common everywhere, especially in grassy and dry places. (*T. schrankii* is a name given to the larva.) *Tettix subulatus*, L., is slightly less common than the above.

The Tettigidæ are known as Grouse Locusts in America, and it is possible that this name will obtain in England.

## LOCUSTODEA

### Locusts

*Phaneropteridæ*. *Leptophyes punctatissima*, Bosc. This pretty species is common throughout England. It is found in the New Forest (Stephens, Thornley).

*Necomemidæ*. *Meconema varium*, Fabr. This species is also very common in Great Britain. It has been taken at Easton-Maudit (Shaw), Lyndhurst (Shaw), and is often taken in the New Forest, especially at 'sugar' (Lucas, McLachlan).

*Conocephalidæ*. *Xiphidium dorsale*, Latr. This species is distinctly rare in Great Britain. It has been taken in the New Forest (Burr, Lucas), at Hengistbury Head, near Christchurch (Lucas). It frequents marshy places, and would be best taken by sweeping.

*Locustidæ*. *Locusta viridissima*, L. This is the largest of our native Orthoptera. Under the name of Great Green Grasshopper it is familiar to every one who has collected in our southern counties.

## A HISTORY OF HAMPSHIRE

*Decticidæ*. *Thamnotrizon cinereum*, L. This species is common in brambles and thickets throughout England, especially in the south. It may be often heard chirping in hedges on fine autumn evenings, or in the afternoon, especially before rain; in the New Forest it has been taken at 'sugar' (Lucas). *Platycleis grisea*, Fabr. This species is by no means rare on the south coast, and frequents chiefly chalky places, especially where rest harrow (*Ononis arvensis*) is growing, as Dale has remarked, and the writer has noticed. It occurs in the Isle of Wight (Porritt), Southsea and Hayling Island (Burr). *Platycleis brachyptera*, L. This species is decidedly local in this country; it frequents open heaths and commons. It has been taken at Bournemouth (Shaw), and also near Lyndhurst (Burr). The Wartbiter (*Decticus verrucivorus*, L.) is one of our rarest and handsomest Orthoptera. Curtis records its capture as *Acrida binglei* by Bingley at Christchurch, and by J. C. Dale in the New Forest.

### GRYLLODEA

#### *Crickets*

*Gryllidæ*. The Wood Cricket (*Nemobius sylvestris*, Fabr.), which is abundant in all woods in France, is very rare in Great Britain, and, as far as we yet know, has only been taken in the New Forest, where it is very common.

The Field Cricket (*Gryllus campestris*, L.) is a rare insect in Great Britain, but occurs in a few sandy places in the south, in the New Forest (Stephens), Farnham (Smith), Selborne (Gilbert White). *Gryllus domesticus*, L., the House Cricket, is common in houses.

*Gryllotalpidæ*. The Mole Cricket (*Gryllotalpa gryllotalpa*, L.) is another local insect, but its large size and peculiar appearance have made it famous. It is not uncommon in the New Forest (Jeffreys), and in the Isle of Wight (Welsford).

### NEUROPTERA

#### ODONATA

#### *Dragon-flies*

The following has been mainly supplied by Mr. R. McLachlan, F.R.S.

The British Dragon-flies number little more than forty species, and of these over thirty have been found in the county.

*Platetrum depressum* is generally distributed in early summer, and often common, especially in the New Forest. *Libellula quadrimaculata*, a large and handsome species, occurs throughout, especially at ponds in heathy districts; its var. *prænubila* is occasionally met with. *Libellula fulva* is recorded from Parley Heath and elsewhere; an example was taken in 1897, by Mr. K. J. Morton, at a pond to the west of Ringwood. *Sympetrum striolatum* is common, and generally distributed in late summer and autumn.



## INSECTS

*Sympetrum flaveolum* has occurred sporadically. *Sympetrum scoticum* is common on boggy heaths. *Orthetrum cancellatum* is found locally about ponds and brick-pits. *Orthetrum cærulescens* is common and generally distributed ; very abundant in the New Forest.

*Cordulia ænea* is locally distributed ; it is common at a pond to the west of Ringwood. *Oxygastra Curtisi* is one of the most interesting species, being probably confined in this country to the New Forest district. It was first described in 1834 by the late Mr. J. C. Dale in *Loudon's Magazine*, and has been reported from Parley Heath and Brockenhurst. Mr. Goss found it in some numbers on Herne Heath, between Christchurch and Herne, in 1878, and again in 1890. An erroneous idea exists to the effect that it is peculiar to Britain ; it is abundant locally in Western France, and occurs in Portugal.

*Gomphus vulgatissimus* has been recorded from the county ; I have not met with it personally. *Cordulegaster annulatus*, a very large and handsome insect, is widely distributed ; often abundant in the New Forest.

*Anax imperator* (*formosus*), a magnificent species, and the largest European Dragon-fly, occurs throughout the county at ponds, especially in woods ; frequent in the New Forest. *Brachytron pratense* is no doubt widely distributed in early summer. *Æschna cyanea* and *grandis* are both generally distributed, and common in late summer and autumn. *Æschna juncea* occurs in the New Forest, and probably elsewhere ; but it is more especially a northern species, usually replacing *cyanea* in the North of England and in Scotland ; *Æschna mixta* has been recorded.

*Calopteryx virgo* and *splendens* (commonly known as 'demoiselles') are widely distributed along streams and in woods, but are seldom found together.

*Platycnemis pennipes* is local, but sometimes found in wet meadows, etc. ; it occurs in the New Forest and elsewhere. *Pyrrhosoma nymphula* (*minium*) is universally distributed, and often abundant. *Pyrrhosoma tenellum* is very local, but is common in bogs in the New Forest, and probably elsewhere in the county ; a variety of the female, in which the abdomen is wholly black, is apparently peculiar to the New Forest district. *Enallagma cyathigerum* is widely distributed ; very common to the west of Ringwood. *Ischnura elegans* is abundant everywhere. *Ischnura pumilio* has been recorded from Parley Heath, and probably elsewhere, but it is apparently extinct, for I know of no recent captures. *Agrion puella* is abundant everywhere. *Agrion pulchellum* no doubt occurs about rivers and large streams, but I am without precise information. *Agrion mercuriale*, a very local British species, nearly confined to Hampshire, is locally common at drainage ditches, etc., in several places in the New Forest, such as near the New Park Enclosure and at Emery Down. *Lestes virens* was once recorded from the New Forest, but it is very doubtful as British. *Lestes sponsa* is common in heathy districts, especially in the New Forest. The following list (Scorpion-flies, Snake-flies, Lacewing-flies, Caddis-flies) has been chiefly supplied by Mr. J. J. F. X. King, of Glasgow, and Mr. K. J. Morton, of Edinburgh :—

# A HISTORY OF HAMPSHIRE

## NEUROPTERA-PLANIPENNIA

- Raphidia
  - notata, Fab.
  - cognata, Ram.
  - maculicollis, Steph.
- Osmylus
  - chrysops, Lin.
- Sisyra
  - fuscata, Fab.
- Micromus
  - variegatus, Fab.
- Hemerobius
  - nervosus, Fab.
  - stigma, Steph.
  - concinnus, Steph.
- Chrysopa
  - alba, Lin.
  - flavifrons, Brau.
  - aspersa, Wesm.
  - ventralis, Curt.
  - perla, Lin.
- Coniopteryx
  - aleyrodiformis, Steph.
- Panorpa
  - communis, Lin.
  - germanica, Lin.

## PSEUDO-NEUROPTERA

- Psocidæ
  - Atropos
    - divinatoria, Müll.
  - Psocus
    - longicornis, Fab.
    - variegatus, Fab.
    - fasciatus, Fab.
    - sexpunctatus, Lin.
  - Stenopsocus
    - immaculatus, Steph.
  - Cæcilius
    - Sp. ?
  - Peripsocus
    - phæopterus, Steph.

## PERLIDÆ

- Nemoura
  - variegata, Oliv.

## TRICHOPTERA

- Phryganea
  - minor, Curt.
  - varia, F.
- Glyphotælius
  - pellucidus, Retz.
- Limnophilus
  - rhombicus, Linn.
  - lunatus, Curt.
  - centralis, Curt.
  - griseus, L.
  - luridus, Curt.
  - sparsus, Curt.
  - vittatus, F.
  - auricula, Curt.
- Sericostoma
  - personatum, Spence.
- Goëra
  - pilosa, F.
- Leptocerus
  - aterrimus, Steph.
  - cinereus, Curt.
  - bilineatus, L.
- Mystacides
  - azurea, L.
- Adicella
  - reducta, M'Lach.
- Æcetis
  - testacea, Curt.
- Polycentropus
  - flavomaculatus, Pict.
  - multiguttatus, Curt.
- Holocentropus
  - dubius, Remb.
- Cyrnus
  - trimaculatus, Curt.
- Oxyethira
  - costalis, Curt.

## HYMENOPTERA

### ACULEATA

The order includes the Ants, Bees, Wasps, Sand Wasps, Saw Flies, Gall Flies and Ichneumon Flies. It is an order of great extent, and our fauna as regards the Ichneumons is very imperfectly known. The first three divisions make up the *Aculeata*, which are considered to represent the highest section of the order ; the ants, humble bees, hive bees and the true wasps are social, forming larger or smaller communities in which the workers (undeveloped females) perform most of the labour of the nest. The rest of the section are solitary, one female constructing its own nest or burrow, laying its eggs therein and provisioning it. In



## INSECTS

some cases the solitary bees make their burrows close together, forming large colonies, which may indicate a tendency to become social. Others of the Aculeates areinquilines or cuckoos, laying their eggs in the cells of the species with which they associate, their larvæ when hatched consuming the food prepared for the offspring of their host. The great resemblance existing between some cuckoos and their hosts is most remarkable, especially between what are called the true humble bees or *Bombi*, and the false, or *Psithyri*. In other cases, such as *Andrena* and *Nomada*, the host and its cuckoo are utterly dissimilar. In all the Hymenoptera the female is armed with a 'sting' or ovipositor. This in the Aculeates is provided with poison bags, and is used as an offensive and defensive weapon.

### HETEROGYNA

#### FORMICIDÆ

- Formica, Linn.
- rufa, Linn. *Isle of Wight*
- sanguinea, Latr. *New Forest*
- exsecta, Nyl. *Bournemouth*
- fusca, Linn. *Isle of Wight*
- race 1. cunicularia, Latr. *Bournemouth*
- Lasius, Fab.
- fuliginosus, Latr. *Bournemouth*
- niger, Linn. *Isle of Wight*
- race 1. alienus, Först. *Bournemouth*
- flavus, De Geer *Isle of Wight*
- Tapinoma, Foerst.
- erratica, Latr. *Bournemouth*

#### PONERIDÆ

- Ponera, Latr.
- contracta, Latr. *Isle of Wight*

#### MYRMICIDÆ

- Myrmecina, Curt.
- latreillei, Curt. *Isle of Wight*
- Tetramorium, Mayr.
- cæspitum, Linn. *Isle of Wight*
- Leptothorax, Mayr.
- acervorum, Fab. *Hants*
- tuberum, Fab. *Isle of Wight*
- Stenamma, West.
- westwoodi, West. *Isle of Wight*
- Myrmica, Latr.
- rubra, Linn.
- race 1. sulcinodis, Nyl. *Bournemouth*
- „ 2. ruginodis, Nyl. *Isle of Wight*
- „ 3. lævinodis, Nyl. „
- „ 4. scabrinodis, Nyl. „
- Solenopsis, West.
- fugax, Ltr. *Isle of Wight*

### FOSSORES

#### MUTILLIDÆ

- Mutilla, Linn.
- europæa, Linn. *Bournemouth*
- rufipes, Ltr. „
- Myrmosa, Latr.
- melanocephala, Fab. *I. of W., Hants*

#### MUTILLIDÆ (continued)

- Methoca, Latr.
- ichneumonides, Latr. *Blackwater, Hants*

#### SAPYRIDÆ

- Sapyga, Latr.
- 5-punctata, Fab. *Hants.*

#### SCOLIIDÆ

- Tiphia, Fab.
- femorata, Fab. *Blackwater, Hants*

#### POMPIDIDÆ

- Agencia, Schiödde.
- variegata, Linn. *New Forest*
- hircana, Fab. „
- Priocnemis, Schiödde.
- fuscus, Linn. *Bournemouth*
- affinis, V. de Lind. „
- exaltatus, Fab. *I. of W., Bournemouth*
- obtusiventris, Schiödde. *Isle of Wight*
- parvulus, Dhlb. *Bournemouth*
- Ceropales, Latr.
- variegatus, Fab. *Parley Copse, Hants*
- Pompilus, Fab.
- unicolor, Spin. *Isle of Wight*
- bicolor, Lep. *Bournemouth*
- rufipes, Linn. *I. of W., Bournemouth*
- cinctellus, Spin. *Hawley*
- plumbeus, Fab. *Isle of Wight*
- viaticus, Linn. *Bournemouth*
- chalybeatus, Schiödde. *New Forest, Bournemouth*
- gibbus, Fab. *Isle of Wight, Bournemouth*
- unguicularis, Thoms. *Bournemouth*
- pectinipes, V. d. Lind. *Parley Heath*

#### ASTATIDÆ

- Astata, Latr.
- boops, Schr. *Parley Heath*
- stigma, Panz. *Isle of Wight*

#### LARRIDÆ

- Trypoxylon, Latr.
- figulus, Linn. *Isle of Wight*
- clavicerum, Lep. „
- Tachytes, Panz.
- pectinipes, Linn. *I. of W., Bournemouth*
- unicolor, Panz. *Isle of Wight*

# A HISTORY OF HAMPSHIRE

## SPHEGIDÆ

- Ammophila, Kirb.
- sabulosa, Linn. *I. of W., Bournemouth*
- hirsuta, Scop. *Isle of Wight*

## PEMPHREDONIDÆ

- Diodontus, Curt.
- minutus, Fab. *Isle of Wight*
- luperus, Shuck. "
- tristis, V. d. Lind. "
- Passalœcus, Shuck.
- insignis, V. d. Lind. *Isle of Wight*
- Pemphredon, Latr.
- lugubris, Fab. *Isle of Wight*
- shuckardi, Mor. "
- lethifer, Shuck. "
- morio, V. d. Lind. *Parley Heath*

## MIMESIDÆ

- Mimesa, Shuck.
- shuckardi, Wesm. *Parley Heath*
- bicolor, Jur. *Isle of Wight*
- unicolor, V. d. Lind. *Parley Heath*
- ater, Fab. *Hawley Heath*
- Nysson, Latr.
- interruptus, Fab. *New Forest*
- Gorytes, Latr.
- mystaceus, Linn.
- campestris, Linn.
- Hoplissus, Lep.
- laticinctus, Lep. *New Forest*
- bicinctus, Rossi. "

## MELLINIDÆ

- Mellinus, Fab.
- arvensis, Linn. *Isle of Wight*
- sabulosus, Fab. *Christchurch*

## CERCERIDÆ

- Philanthus, Fab.
- triangulum, Fab. *I. of W., Heron Court*
- Cerceris, Fab.
- arenaria, Linn. *Bournemouth*
- 5-fasciata, Rossi. *Hawley, Parley Heath*
- labiata, Fab. *Parley Heath*

## CRABRONIDÆ

- Crabro, Fab.
- leucostoma, Linn. *Isle of Wight*
- aphidum, Lep. *Herne*
- palmarius, Schreb. "
- palmipes, Linn. *Bournemouth*
- varius, Lep. *Isle of Wight*
- wesmaeli, V. d. Lind. *Isle of Wight, Bournemouth*
- elongatulus, V. d. Lind. *Isle of Wight*
- dimidiatus, Fab. *Isle of Wight*
- 4-maculatus, Fab. "
- peltarius, Schreb. "
- cephalotes, Panz. "
- albilabris, Fab. "
- panzeri, V. d. Lind. "
- Oxybelus, Latr.
- uniglumis, Linn. "
- mandibularis, Dhlb. *Bournemouth*

## DIPLOPTERA

### VESPIDÆ

- Vespa, Linn.
- vulgaris, Linn. *Isle of Wight*
- germanica, Fab. "

### EUMENIDÆ

- Odynerus, Latr.
- basalis, Sm. *Bloxworth*
- melanocephalus, Gmel. *Isle of Wight*
- callosus, Thoms. "
- parietum, Linn. *Bournemouth*
- pictus, Curt. *Isle of Wight*
- parietinus, Linn. *Bournemouth*
- Eumenes, Latr.
- coarctata, Linn. *Blackwater, Parley Heath, Bournemouth*

## ANTHOPHILA

### Subd. I. OBTUSILINGUES

- Colletes, Latr.
- succincta, Linn. *Bournemouth*
- fodiens, Kirb. "
- picistigma, Thoms. *Chewton, I. of W.*
- marginata, Sm. *Isle of Wight*
- daviesana, Sm. "
- Prosopis, Fab.
- cornuta, Sm. *Cove Common*
- dilatata, Kirb. *Blackwater, Isle of Wight*
- communis, Nyl. *Isle of Wight*
- hyalinata, Sm. "
- confusa, Nyl. "
- brevicornis, Nyl. "

### Subd. II. ACUTILINGUES

- Sphecodes, Latr.
- gibbus, Linn. *Isle of Wight*
- reticulatus, Thoms. "
- subquadratus, Sm. *New Forest*
- puncticeps, Thoms. *Bournemouth*
- similis, Wesm. *New Forest*
- affinis, v. Hag. *Isle of Wight*
- dimidiatus v., Hag. *New Forest*
- Halictus, Latr.
- rubicundus, Chr. *Isle of Wight*
- xanthopus, Kirb. "
- leucozonius, Schr. *Bournemouth*
- zonulus, Smith *New Forest*
- quadrinotatus, Kirb. *Isle of Wight*
- lævigatus, Kirb. "
- prasinus, Sm. *Bournemouth, Christchurch*
- malachurus, Kirb. *Isle of Wight*
- cylindricus, Fab. "
- longulus, Sm. "
- subfasciatus, Nyl. *New Forest*
- pauxillus, Schk. *Isle of Wight*
- villosulus, Kirb. *Bournemouth*
- puncticollis, E. Saund. "



# INSECTS

- Halictus, nitidiusculus*, Kirb. *Bournemouth*  
 — *breviceps*, E. Saund. " "  
 — *punctatissimus*, Schk. " *I. of W.*  
 — *minutissimus*, Kirb. *Isle of Wight*  
 — *tumulorum*, Linn. " "  
 — *gramineus*, Sm. *Cove Common*  
 — *smeathmanellus*, Kirb. *Isle of Wight*  
 — *morio*, Fab. *Isle of Wight*  
 — *leucopus*, Kirb. " "  
*Andrena*, Fab.  
 — *hattorfiana*, Fab. *Isle of Wight*  
 — *cetii*, Schr. *Parley Heath*  
 — *albicans*, Kirb. *Isle of Wight*  
 — *pilipes*, Fab. *Bournemouth*  
 — *bimaculata*, Kirb. " "  
 — *floreæ*, Fab. *Blackwater*  
 — *rosæ*, Panz. *Isle of Wight*  
 — *nitida*, Fourc. " "  
 — *fulva*, Schr. " "  
 — *clarkella*, Kirb. " "  
 — *nigroænea*, Kirb. " "  
 — *gwynana*, Kirb. " "  
 — *angustior*, Kirb. *New Forest*  
 — *varians*, Rossi. *Isle of Wight*  
 — *helvola*, Kirb. *New Forest*  
 — *nigriceps*, Kirb. *Bournemouth*  
 — *simillima*, Sm. " "  
 — *denticulata*, Kirb. " "  
 — *fuscipes*, Kirb. " "  
 — *tridentata*, Kirb. " "  
 — *fulvicrus*, Kirb. *Isle of Wight*  
 — *argentata*, Sm. *Bournemouth*  
 — *chrysosceles*, Kirb. *Isle of Wight*  
 — *analis*, Panz. *Parley Heath*  
 — *coitana*, Kirb. *Bournemouth*  
 — *fulvago*, Chr. *Blackwater, Isle of Wight*  
 — *humilis*, Imh. *Blackwater*  
 — *labialis*, Kirb. *Bournemouth*  
 — *minutula*, Kirb. *Isle of Wight*  
 — *proxima*, Kirb. *Blackwater*  
 — *wilkella*, Kirb. *Isle of Wight*  
 — *afzeliella*, Kirb. *New Forest*  
*Dasypoda*, Latr.  
 — *hirtipes*, Lata. *Bournemouth*  
*Cilissa*, Leach.  
 — *hæmorrhoidalis*, Fab. *Bournemouth*  
 — *leporina*, Panz. " "  
*Panurgus*, Panz.  
 — *calcaratus*, Scop. " "  
 — *ursinus*, Gmel. " "  
*Dufourea*, Lep.  
 — *vulgaris*, Schk. *Chewton*  
*Nomada*, Fab.  
 — *solidaginis*, Panz. *Bournemouth*  
 — *sexfasciata*, Panz. *New Forest*  
 — *succincta*, Panz. *Isle of Wight*  
 — *alternata*, Kirb. " "  
 — *jacobææ*, Panz. *Bournemouth*  
 — *lathburiana*, Kirb. *Isle of Wight*  
*Nomada*, *alboguttata*, H.-S. *Bournemouth*  
 — *ochrostoma*, Kirb. *Isle of Wight*  
 — *roberjeotiana*, Panz. *Blackwater, Parley Heath*  
 — *armata*, H.-S. *Isle of Wight*  
 — *ferruginata*, Kirb. *Hawley*  
 — *fabriciana*, Linn. *Isle of Wight*  
*Epeolus*, Latr.  
 — *productus*, Thoms. *Isle of Wight*  
 — *rufipes*, Thoms. *Parley Heath, I. of W.*  
*Cœlioxys*, Latr.  
 — *vectis*, Curt. *Isle of Wight*  
 — *rufescens*, Lep. *Hants, Isle of Wight*  
*Megachile*, Latr.  
 — *maritima*, Kirb. *Isle of Wight*  
 — *willughbiella*, Kirb. *New Forest*  
 — *circumcincta*, Lep. *Parley Heath*  
 — *centuncularis*, Linn. *Isle of Wight*  
 — *versicolor*, Sm. *Bournemouth*  
 — *argentata*, Fab. *Isle of Wight*  
*Anthidium*, Fab.  
 — *manicatum*, Linn. " "  
*Stelis*, Panz.  
 — *aterrima*, Panz. *Blackwater*  
 — *8-maculata*, Sm. " "  
*Osmia*, Panz.  
 — *rufa*, Linn. *Isle of Wight*  
 — *xanthomelana*, Kirb. *Isle of Wight*  
 — *coerulescens*, Linn. " "  
 — *fulviventris*, Panz. " "  
 — *aurulenta*, Panz. " "  
 — *bicolor*, Schk. *Parley Heath*  
 — *leucomelana*, Kirb. *Hawley*  
 — *spinulosa*, Kirb. *Isle of Wight*  
*Eucera*, Scop.  
 — *longicornis*, Linn. *New Forest*  
*Melecta*, Latr.  
 — *armata*, Panz. *New Forest*  
*Anthophora*, Latr.  
 — *pilipes*, Fab. *Isle of Wight*  
 — *furcata*, Panz. " "  
 — *quadrимaculata*, Panz. *Bournemouth, Parley Heath*  
*Saropoda*, Latr.  
 — *bimaculata*, Panz. *Bournemouth*  
*Psithyrus*, Lep.  
 — *rupestris*, Fab. *Isle of Wight*  
 — *vestalis*, Fourc. " "  
*Bombus*, Latr.  
 — *agrorum*, Fab. *Isle of Wight*  
 — *hortorum*, Linn. *Bournemouth*  
 — *jonellus*, Kirb. " "  
 — *pratorum*, Linn. *Isle of Wight*  
 — *sylvarum*, Linn. " "  
 — *lapidarius*, Linn. " "  
 — *terrestris*, Linn. " "  
*Apis*, Linn.  
 — *mellifica*, Linn. *Isle of Wight*

# A HISTORY OF HAMPSHIRE

## PHYTOPHAGA

The phytophagous Hymenoptera, *i.e.* Saw Flies, Wood Wasps and Gall Flies are very well represented throughout Hampshire, especially in the New Forest district. Out of the total number of known species quite half have already been recorded from the New Forest, and fresh discoveries are made yearly, showing how well the country would repay thorough and systematic investigation. Few species have as yet been recorded from the Isle of Wight; but in all probability this is due to the scarcity of workers. It is much to be regretted that so few entomologists take up this most interesting family, for very much yet remains to be done in the way of apportioning the larvæ to their imagos and generally tracing their life history.

As a rule it is easy to induce Saw Flies to breed in captivity; a bell glass over a living sprig, or better still, a growing specimen of the food-plant, are all that is required in the way of apparatus. The plant should daily be lightly sprinkled with water, as Saw Flies are thirsty creatures, and soon perish if kept quite dry. Neither must the plant be allowed to dry up when the eggs are laid, or they will shrivel and die. Generally speaking the eggs take about a week to hatch, but if the weather be very dry or inclement it will retard them considerably.

Some of the larger species, such as *Allantus arcuatus* and *Tentredo mesomela*, are very carnivorous when they reach the perfect state, and will devour smaller kinds, and even their own eggs, unless they are given small flies with which to satisfy their hunger. They are also very quarrelsome among themselves, and two confined together will bite off each other's legs and antennæ, fighting savagely till both are too maimed to be able to move. *Lophyrus pini*, though not otherwise carnivorous, is a terrible fighter. So far as is generally known, only one Saw Fly, *Macrophya punctum-album*, is a vegetable feeder in the perfect state. This fly feeds freely on young ash leaves, gnawing holes into them. Ash is also its food plant in the larval stage.

Saw flies are very generally parthenogenetic, and in all species the females greatly outnumber the males, while in several kinds the male is either extremely rare or, in one case at least, absolutely non-existent. *Pæcilosoma luteolum* has been bred in large numbers for five years in succession at the rate of three broods a year, sometimes as many as a thousand flies hatching in the course of one week, but no male has ever occurred. All these generations are descended from one larva picked up in the Race-Course bog at Lyndhurst in 1894, and though no fresh blood has been introduced, their fertility shows no sign of decreasing. On the other hand many species, particularly of the smaller *Nemati*, only produce male flies from unfertilized eggs. No rule can be given for this phenomenon, as in a genus one species may produce males only from virgin eggs, such as *Abia sericea*, while *Abia fasciata* will only bring forth on an average one male to 500 females.



## INSECTS

In this country Saw Flies are not often sufficiently abundant to do much damage, only a few kinds arriving at this 'bad eminence.' Such, of course, are *Athalia spinarum* (the Turnip Fly), *Nematus ribesii* (or Gooseberry Fly), and *Eriocampa limacina* (commonly known as the Pear Tree Slug), all of which are pests to be exterminated whenever met with. Occasionally *Nematus pavidus* and *Lophyrus pini* have multiplied unduly and become nuisances, but their enemies are too many and active for this to happen often.

Many rare and local species may be found in the New Forest, such as *Nematus compressicornis* on poplar scrub in the Manor Park at Minstead; *N. tibialis* on the young acacias in Brick Kilns Enclosure; *Strongylogaster delicatulus* rarely, on the bracken between Pond Head and Jones' Enclosure; *Cræsus latipes* nearly everywhere; *Hylotoma fuscipes* and *H. gracilicornis* in Pond Head Enclosure; and in 1898 six specimens of the rare male *Strongylogaster cingulatus* in Puck Pits.

The *Siricidæ*, or 'Wood Wasps,' also occur in the New Forest and other parts of Hampshire. *Sirex gigas* is not uncommon, and probably often escapes observation by being mistaken for a hornet, which the female *Sirex* strongly resembles when on the wing, its deep hum as it flies strengthening the delusion.

Gall Flies form another large group of insects to be met with in Hampshire and the Isle of Wight, and from the number of oak trees the district offers a fine hunting ground for students of the gall-makers, their 'inquilines' and parasites. The modes of reproduction in these Gall Flies are highly interesting. Among the oak Gall Flies parthenogenesis is common; in fact, to quote from Mr. Cameron's monograph, 'not one single-brooded species is known to have a male, parthenogenesis among such being universal.' The same writer goes on to remark: 'Still more remarkable is the occurrence of alternation of generation among the gall-making species—of species having a bisexual spring generation reproducing sexually, followed by an autumnal unisexual brood, reproducing parthenogenetically.'

Besides this section and their 'inquilines' there is another composed of true animal parasites, living, like the *Ichneumonidæ* proper, on other insect larvæ, chiefly on *Diptera* and *Homoptera*. Some of these parasites are very beautiful, especially the *Chalcididæ*, small brilliantly coloured blue and green flies which prey on the gall-makers.

Other parasites living at the expense of the gall insects are the 'commensals' which are most often found in the large galls, and feed on the gall mass without injuring or interfering with the development of their hosts.

The forms and sizes of galls are exceedingly various, much more so than their colouring, which is usually some shade of red, green, or brown, though certain galls found on the Turkey Oak, in Kew Gardens, are always—according to Mr. Cameron—of a 'deep purple colour.' Few species of Gall Flies have as yet been reported from Hampshire, but when properly worked no doubt the district will be found to be rich in them.

## A HISTORY OF HAMPSHIRE

As might be expected, *Ichneumonidæ* are abundant and various, and the Saw Flies come in for much attention from them ; in fact, it is rare to find a brood of the gregarious species, some members of which have not been doomed. In the case of a green or light-coloured larva it is often easy enough to detect the ichneumon mark, two or three tiny black spots round which the skin is sometimes discoloured, showing that the larva has been 'stung.'

Spiders and their nests often fall a prey to ichneumons. Several kinds have been bred from a few nests made by a species of spider which hangs a bell-shaped nest made of silk coated with grains of earth from grass or heather stalks, and which is very common in the Forest during the summer months.

A large proportion of the *Ichneumonidæ* bred from these nests were apterous. Sometimes two were hatched out of the same nest, but more commonly only one. The larva was a white, footless grub, and fed on the cluster of eggs deposited by the spider in the nest.

### A LIST OF THE PHYTOPHAGOUS HYMENOPTERA OCCURRING IN THE COUNTY

#### TENTHREDINIDÆ

- Tenthredo, Cameron
- livida, Linn. *Hants*
- solitaria, Scop. *Lyndhurst*
- velox, Fab. *Burley*
- rufiventris, Pz. *New Forest*
- balteata, Klug. *Lyndhurst*
- mandibularis, Pz. *New Forest*
- maculata, Fourc. *Burley*
- bicincta, Linn. *New Forest*
- mesomela, Linn. *Hants*
- punctulata, Klug. *Lyndhurst*
- viridis, Linn. *Hants*
- gibbosa, Fall. *New Forest*
- Tenthredopsis, Cam.
- microcephala, Sep. *New Forest*
- femoralis, Stephens. *Burley*
- caliginosa, Ste. *Burley*
- scutellaris, Fab. *New Forest*
- inornata, Cam. *Burley*
- nassata, Linn. *New Forest*
- Pachyprotasis, Cam.
- antennata, Klug. *New Forest*
- Macrophya, Cam.
- blanda, Fab. *Burley*
- neglecta, Klug. *Hants*
- 12-punctata, Linn. *New Forest*
- albicincta, Schr. *Lyndhurst*
- rustica, Linn. *Hants*
- punctum album, Linn. *Lyndhurst*
- Allantus, Cam.
- scrophulariæ, Linn. *Hants*
- tricinctus, Cam. *Hants*
- arcuatus, Cam. „

#### DOLERIDES

- Dolerus, Cam.

#### DOLERIDES (*continued*)

- Dolerus fulviventris, Cam. *Hants*
- gonagra, Cam. „
- hæmatodis, Cam. *New Forest*
- anthracinus, Klug. *Lyndhurst*
- fissus, Htg. *New Forest*
- niger, Cam. *Lyndhurst*

#### SELANDRIADES

- Strongylogaster, Dbm.
- cingulatus, Thoms. *New Forest*
- delicatulus, Cam. *Lyndhurst*
- Selandria, Cam.
- sixii, Voll. *Hants*
- stramineipes, Cam. *New Forest*
- analis, Thoms. „
- Taxonus, Cam.
- equiseti, Cam. *Hants*
- glabratus, Cam. *Lyndhurst*
- Pœcilosoma, Cam.
- luteolum, Cam. *Hants and I. of Wight*
- pulveratum, Cam. *Hants*
- Eriocampa, Cam.
- ovata, Cam. *Hants and Isle of Wight*
- annulipes, Cam. *Hants*
- varipes, Cam. *New Forest*
- limacina, Cam. *Hants and I. of Wight*
- rosæ, Cam. „ „ „
- Blennocampa, Cam.
- albipes, Thoms. *Hants and I. of Wight*
- lineolata, Cam. *New Forest*
- melanocephalus, Cam. „
- eppiphium, Thoms. *Burley*
- pusilla, Thoms. *Hants and I. of Wight*
- Emphytus, Cam.
- togatus, Cam. *Hants*
- cinctus, Klug. „



## INSECTS

### SELANDRIADES (*continued*)

- Emphytus cingulatus, Ste. *New Forest*
- rufocinctus, Cam. *Lyndhurst*
- tibialis, Klug. ”
- serotinus, Klug. *Hants*
- Phyllotoma, Cam.
- nemorata, Thoms. *Hants*
- Fenusa, Cam.
- betulæ, Cam. *Hants*
- Athalia, Cam.
- ancilla, Sep. *Lyndhurst*
- spinarum, Leach. *Hants*
- rosæ, Ste. *Hants and Isle of Wight*
- annulata, Ste. *Lyndhurst*

### NEMATINA

- Hemichroa, Cam.
- alni, Ste. *Hants*
- rufa, Cam. *New Forest*
- Dineura, Cam.
- virididorsata, Cam. *Lyndhurst*
- stilata, Htg. ”
- testaceipes, Htg. ”
- Camponiscus, Cam.
- luridiventris, Cam. *New Forest*
- Cladius, Cam.
- pectinicornis, Cam. *New Forest*
- viminalis, Voll. *Hants*
- rufipes, Sep. *Lyndhurst*
- padi, Thoms. *Hants*
- Brullæi, Dbm. *Lyndhurst*
- Cræsus, Cam.
- septentrionalis, Cam. *Hants and I. of W.*
- latipes, Cam. *New Forest*
- varus, Cam. ”
- Nematus, Cam.
- compressicornis, André. *Minstead*
- fulvipes, Thoms. *Lyndhurst*
- puncticeps, Cam. *New Forest*
- ruficornis, Olivier. ”
- cratægi, Zad. *Lyndhurst*
- lucidus, Cam. *New Forest*
- capreæ, Zad. *Lyndhurst*
- lacteus, Thoms. *New Forest*
- palliatus, Dbm. ”
- curtispina, Thoms. *Lyndhurst*
- miliaris, Sep. ”
- glutinosæ, Cam. ”
- tibialis, Newman ”
- consobrinus, Vol. ”

### NEMATINÆ (*continued*)

- Nematus myosotidis, Cam. *Burley*
- betulæ, Htg. *New Forest*
- glottianus, Cam. *Hants*
- abdominalis, Dbm. ”
- ruficapillis, Cam. ”
- salicis, Sep. *Winchester*
- ribesii, Dbm. *Hants and Isle of Wight*
- pavidus, Sep. *Hants*
- rumicis, Thoms. *Lyndhurst*
- leucostictus, Htg. *New Forest*
- gallicola, Ste. *Winchester*

### CIMBICIDES

- Cimbex, Cam.
- sylvorum, Fab. *Lyndhurst*
- Trichiosoma, Cam.
- lucorum, Thoms. *Lyndhurst*
- betuleti, Cam. ”
- Abiides, Cam.
- Abia, Cam.
- sericea, Ste. *Burley*
- fasciata, Br. *Lyndhurst*

### HYLOTOMINA

- Hylotoma, Cam.
- gracilicornis, Klug. *Lyndhurst*
- fuscipes, Fall. *New Forest*
- ustulata, Fab. *Hants*
- rosæ, Fab. *New Forest*
- cyaneocrocea, Ste. *New Forest*
- melanochra, Br. ”
- Lophyrina, Cam.
- Lophyrus, Cam.
- pini, Klug. *Hants*
- sertiferus, Cam. *Bitterne*
- Pamphilus, Cam.
- flaviventris, Cam. *New Forest*
- sylvaticus, Cam. *Burley*
- inanitus, Cam. *New Forest*
- depressus, Cam. ”
- hortorum, Cam. *Burley*
- Cephidæ, Cam.
- Cephus, Cam.
- niger, Cam. *Lyndhurst*
- Siricidæ, Cam.
- Xiphydria, Cam.
- dromedarius, Ste. *New Forest*

### SIREX

- gigas, Linn. *New Forest*

## COLEOPTERA

### Beetles

The order *Coleoptera* or sheath-winged insects, so called from the hard and chitinous upper wings, is represented in Britain by upwards of 3,500 species; of these probably at least two-thirds occur in Hampshire. No detailed account, however, appears to have been kept of the commoner

## A HISTORY OF HAMPSHIRE

species, so that the exact number of representatives of the group cannot be noted with any accuracy. No county, however, can furnish a longer record of rare species. This is, of course, in great measure due to the fact that Hampshire includes the New Forest; but apart from this, a large number of good species have been found on and near the coast in the neighbourhood of Lymington, Southampton, Portsmouth, Southsea, etc.

The New Forest has for long been known as the entomologist's paradise. The Lepidoptera have, of course, been more sought after by the general public, but the Coleoptera of the Forest are quite as interesting, if not more so. No district in the kingdom contains a larger amount of rare beetles, and there are several which have only occurred within its precincts. One of the most noticeable of these is the fine Staphylinid, *Velleius dilatatus*, which is an inquiline of hornets' nests: the rarer Elateridæ are well represented. The beautiful beetle *Anthaxia nitidula*, one of the greatest prizes among the British beetles, is found on celandine and whitethorn, and *Eucnemis capucina*, also peculiar to the Forest, is one of the most interesting additions to our fauna in comparatively recent times. It was taken near Brockenhurst in an old beech tree in 1886, by Mr. Gorham, Mr. Champion, and Dr. Sharp, and its capture proves that we have not yet exhausted all possible discoveries of indigenous beetles. One water beetle, *Agabus brunneus*, has not occurred in Britain outside the Forest precincts; and the wood beetles, *Colydium elongatum*, *Oxylæmus cylindricus* and *Endophlæus spinulosus*, as well as the very rare heteromorous beetle *Melandrya dubia*, have been found in no other district in Britain. Among scarce and characteristic species, which have been recorded, in some cases perhaps erroneously, from other localities, may be mentioned *Agrilus sinuatus*, *Microrrhagus pygmæus*, *Elater sanguineus*, *lythropterus*, *sanguinolentus*, *pomona* and *elongatulus* (these 'red' Elaters are much sought after by collectors in the Forest), *Athous rhombeus*, and a considerable number of rare Longicorns, notably *Strangalia aurulenta*, *Leptura scutellata* and *Grammoptera analis*. The wood-boring beetles are, of course, well represented, but of late years the fallen trees have been more frequently removed, instead of being left to decay, and this tends to decrease materially the number of good species.

If we pass to other parts of the county, we shall find that a great many rare species were discovered on the coast near Portsmouth and Southsea by Mr. Moncreaff. Two of his best finds were *Pachytychius hæmatocephalus*, which only occurs in Britain in the Portsmouth district, and *Cafius cicatricosus*, which has since been found at Shoreham and Worthing. Lymington salterns have produced many good species, and Mr. Gorham has found several rarities near Southampton. The whole county in fact, with its coast line and forest country and chalk formations, is most prolific in Coleoptera, and there is no other district in the kingdom which will better repay working.

The following list contains the more local and rarer species only; it must not therefore be regarded as in any way a complete list.



# INSECTS

## A LIST OF THE MORE RARE AND LOCAL COLEOPTERA OCCURRING IN THE COUNTY

The species without localities appended have occurred in the New Forest. Those marked \* are eminently characteristic of the locality. Those marked \*\* have hitherto been taken ONLY in the New Forest, so far as Britain is concerned.

### CICINDELIDÆ

- Cicindela sylvatica*, L. *Bournemouth*  
— *hybrida*, v. *maritima*, Deg. *Hampshire Coast*

### CARABIDÆ

- Cychrus rostratus*, L.  
*Carabus violaceus*, L. *var. exasperatus*  
— *nitens*, L.\*  
— *arvensis*, Fab.  
*Calosoma inquisitor*, L.  
*Notiophilus rufipes*, Curt.  
*Panagæus quadripustulatus*, Sk. *Hampshire*  
*Licinus depressus*, Panz. *Winchester*  
*Badister peltatus*, Panz. *Portsmouth*  
*Oodes helopioides*, F. "  
*Stenolophus tentonus*, Schr. *Bournemouth*  
— *skrimshirani*, Steph. *Lymington*  
*Acupalpus flavicollis*, Sturm. *Bournemouth and Lymington*  
— *dorsalis*, F. *Bournemouth*  
— *brunnipes*, Sturm. *Bournemouth*  
*Bradycellus cognatus*. "  
*Harpalus punctatulus*, Duft. "  
— *azureus*, F. *Bournemouth*  
— *rupicola*, Sturm. "  
— *caspius*, Stev.  
— *servus*, Duft. *Portsmouth*  
— *ignavus*, Duft. *Bournemouth*  
— *neglectus*, Dej. "  
*Dichirotrichus obsoletus*. "Dej., *Lymington*  
*Anisodactylus pœciloides*, Steph. "  
— *and Christchurch*  
*Platyderus ruficollis*, Marsh *Bournemouth*  
*Pterostichus dimidiatus*, Ol.  
— *lepidus*, F.  
— *oblongopunctatus*, F.  
— *anthracinus*, Ill. *Christchurch*  
— *inæqualis*, Marsh *Lymington*  
*Amara convexiuscula*, Marsh *Lymington*  
— *rufocincta*, Dej. *Bournemouth*  
— *lucida*, Duft. "  
*Taphria nivalis*, Panz. "  
*Anchomenus viduus*, Panz. "  
*Tachys scutellaris*, Germ. *Lymington and Christchurch*  
*Lymnæum nigropiceum*, Marsh *Portsea*  
*Bembidium ephippium*, Marsh *Lymington*  
— *fumigatum*, Duft. *Alverstoke*  
— *bruxellense*, Wesm. *Southampton*  
— *pallidipenne*, Ill. *Bournemouth*

### CARABIDÆ (continued)

- Pogonus luridipennis*, Germ. *Lymington*  
— *littoralis*, Duft. "  
*Cymindis axillaris*, F.  
*Lebia chlorocephala*, Hoff.  
— *cyclocephala*, L. *Bournemouth*  
— *crux-minor*, L. *Lymington, Dawson, Geod. Brit., p. 17.*  
*Dromius nigriventris*, Thoms. *Lymington*  
*Lionychus quadrillum*. Duft. "  
*Drypta dentata*, Ross. *Hampshire Coast*

### DYTISCIDÆ

- Haliplus variegatus*, Sturm.  
*Hydrovatus clypealis*, Sharp *Portsea*  
*Bidessus unistriatus*, Schr. *Southsea*  
*Deronectes latus*, Steph.  
*Hydroporus flavipes*, Ol.  
— *obscurus*, Sturm.  
— *discretus*, Fairm.  
*Agabus brunneus*, F.\*\*  
— *didymus*, Ol.

### GYRINIDÆ

- Gyrinus elongatus*, Auté. *Bournemouth*

### HYDROPHILIDÆ

- Philhydrus maritimus*, Thoms. *Lymington*  
— *nigricans*, Zett.  
— *coarctatus*, Gredl.  
*Paracymus nigro-æneus*, Sahlb.  
*Helochares punctatus*, Sharp  
*Laccobius alutaceus*, Thoms. *Lymington*  
*Berosus spinosus*, Stev. *Lymington*  
— *affinis*, Brullé. "  
*Limnebius nitidus*, Marsh  
*Chætarthria seminulum*, Herbst.  
*Helophorus laticollis*, Thoms.  
— *mulianti*, Rye *Lymington*  
*Octhebius punctatus*, Steph. *Lymington*  
*Hydræna testacea*, Curt.  
— *nigrita*, Germ.  
— *angustata*, Sturm.  
*Cercyon depressus*, Steph. *Hayling I.*

### STAPHYLINIDÆ

- Aleochara lata*, Grav.  
— *brevipennis*, Grav.  
— *tristis*, Grav.  
— *cuniculorum*, Kr. *Hayling I.*  
— *mycetophaga*, Kr.  
— *grisea*, Kr. *Southsea*  
— *obscura*, Er. *Southampton*  
*Microglossa pulla*, Gyll.

## A HISTORY OF HAMPSHIRE

### STAPHYLINDÆ (continued)

- Ischnoglossa prolixa, Grav.
- corticina, Er.
- Ocyusa incrassata, Kr.
- picina, Aubé. *Southampton*
- Atemeles paradoxus, Grav. *Bournemouth*
- Myrmedonia collaris, Payk.
- plicata, Er. *Bournemouth* \*\*
- Thamiaræa hospita, Maerk.
- Homalota planifrons, Wat. *Hayling I.*
- littorea, Sharp *Lymington*
- imbecilla, Wat. ”
- princeps, Sharp *Hayling I.*
- linearis, Grav.
- cœsula, Er. *Hayling I.*
- elegantula, Bris.
- hepatica, Er.
- coriaria, Kr. *Winchester*
- nigricornis, Thoms.
- ravilla, Er.
- atomaria, Kr.
- autumnalis, Er.
- sordidula, Er.
- pilosiventris, Thoms.
- canescens, Sharp
- intermedia, Thoms. *Winchester*
- testudinea, Er.
- Myrmecopora uvida, Er. *Southampton*
- sulcata, Kies. *Southsea*
- Gyrophæna gentilis, Er.
- Silusa rubiginosa, Er. *Winchester*
- Sipalia ruficollis, Er.
- Bolitochara lucida, Grav.
- bella, Maerk.
- Phytosus spinifer, Curt. *Hayling I.*
- Oligota apicata, Er.
- Gymnusa brevicollis, Payk.
- Tachyporus transversalis, Grav.
- Tachinus elongatus, Gyll.
- Megacronus cingulatus, Mann.
- inclinans, Grav.
- Mycetoporus lucidus, Er.
- longulus, Mann.
- clavicornis, Steph.
- Habrocerus capillaricornis, Grav.
- Velleius dilatatus, Fab.\*
- Quedius microps, Grav.
- ventralis, Ar.\*
- brevicornis, Thoms.
- cruentus, Ol.
- xanthopus, Er.
- scintillans, Grav. *Winchester*
- Emus hirtus, Linn.\*
- Leistotrophus murinus, L.
- Staphylinus fulvipes, Scop.
- stercorarius. *Bournemouth*
- latebricola, Grav.
- erythropterus, L.
- Ocypus brunnipes, F.
- fuscatus, Grav.

### STAPHYLINDÆ (continued)

- Ocypus compressus, Marsh
  - Philonthus addendus, Sharp
  - thermarum, Aube. *Farnham*
  - splendidulus, Grav.
  - nigrita, Nord.
  - pullus, Nord. *Portsea (Power)*
  - puella, Nord.
  - Cafius cicatricosus, Er. *Portsmouth*
  - sericeus, Holme. ”
  - Actobius cinerascens, Grav.
  - signaticornis, Rye *Lymington*
  - Lathrobium longulum, Grav. *Portsmouth*
  - Achenium depressum, Grav. *Southsea*
  - Cryptobrium glaberrimum, Herbst.
  - Stilicus orbiculatus, Er.
  - Medon castaneus, Grav.
  - ripicola, Kr. *Southampton*
  - obsoletus, Nord.
  - Pæderus fuscipes, Curt.
  - caligatus, Er.\*
  - Stenus lustrator, Er.
  - ærosus, Er. *Bournemouth*
  - foveicollis, Kr.
  - kiesewetteri, Rosh.
  - Oxyporus rufus, L. *Winchester*
  - Bledius spectabilis, Kr. *Bournemouth*
  - tricornis, Herbst. *Lymington*
  - unicornis, Germ. ”
  - arenarius, Payk. *Hayling I.*
  - spacus, Block. ”
  - Oxytelus insecatus, Grav. *Portsmouth*
  - maritimus, Thoms. *Hayling I.*
  - Trogophloeus halophilus, Kies. *Lymington*
  - Acidota crenata, F. *Bournemouth*
  - Syntomium æneum, Müll.
  - Micralymma brevipenne, Steph. *Lymington*
  - Homalium salicis, Gyll.
  - iopterum, Steph.
  - striatum, Grav.
  - Hapalaræa pygmæa, Gyll.
  - Proteinus atomarius, Er.
  - Megarthus hemipterus, Ill.
  - Phlæocharis subtilissima, Mann.
  - Prognatha quadricornis, Luc. *Winchester*
- ### SILPHIDÆ
- Clambus minutus, Sturm. *Southampton*
  - Agathidium nigripenne, Kug.
  - seminulum, Linn.
  - lævigatum, Er.
  - confusum, Pris.
  - nigrinum, Sturm.
  - Amphicyllis globus, Er.
  - Liodes humeralis, Kug.
  - orbicularis, Herbst.
  - Cyrtusa pauxilla, Schmidt
  - Anisotoma cinnamomea, Panz.
  - dubia, Kug.
  - punctulata, Gyll.
  - curvipes, Schmidt



# INSECTS

## SILPHIDÆ (continued)

- Anisotoma nigrita, Schmidt
- Colenis dentipes, Gyll.
- Triarthron maerkeli, Schmidt \*
- Necrophorus interruptus, Steph.
- Silpha tristis. Ill. *Alverstoke*
- obscura, L. *Bournemouth*
- quadripunctata, Linn.\*
- Choleva colonoides, Kraetz.
- Colon vienneuse, Herbst.
- Neuraphes sparshalli, Denny
- Scydmaenus exilis, Er.

## PSSELAPHIDÆ

- Bythinus curtisii, Denny
- Rybaxis sanguinea, L. *Portsmouth*
- Batrissus venustus, Reich.
- Bryaxis waterhousei, Rye *Lyminster and Portsmouth*
- hæmatica, Reich.
- impressa, Panz.
- Bibloporus bicolor, Denny
- Euplectus kunzei, Aubé.
- punctatus, Muls.
- karsteni, Reich.
- piceus, Mots.

## TRICHOPTERYGIDÆ

- Pteryx suturalis, Heer.
- Ptinella aptera, Guer.
- Ptenidium turgidum, Thoms.
- gressneri, Er.\*

## CORYLOPHIDÆ

- Orthoperus kluki, Wank.

## PHALACRIDÆ

- Phalacrus brunnipes, Bris. *Lyminster*
- substriatus, Gyll.
- Olibrus corticalis, Panz. *Bournemouth*
- liquidus, Er. *Bournemouth*

## COCCINELLIDÆ

- Mysia oblongoguttata, L. *Bournemouth*
- Hyperaspis reppensis, Herbst.
- Scymnus capitatus, F. *Hampshire*
- Chilocorus bipustulatus, L.

## ENDOMYCHIDÆ

- Dacne humeralis, Fab.
- Triplax russica, Linn.
- ænea, Schall.
- Cyrtotriplax bipustulata, Fab.

## COLYDIIDÆ

- Colydium elongatum, Fab.\*\*
- Oxylæmus cylindricus, Panz.\*\*
- Orthocerus muticus, Linn.
- Endophloeus spinulosus, Latr.\*\*
- Ditoma crenata, Fab.
- Synchita juglandis, Fab.\*
- Cicones variegatus, Hellw.
- Cerylon ferrugineum, Steph.
- deplanatum, Gyll.\*\*

## HISTERIDÆ

- Hister quadrimaculatus, L.
- merdarius, Hoff.

## HISTERIDÆ (continued)

- Carcinops minima, Aubé.
- Paromalus flavicornis, Herbst.
- parallelopipedus, Herbst.\*\*
- Dendrophilus pygmæus, Linn.
- Gnathonus nannetensis, Mars.
- Saprinus rugifrons, Payk.
- maritimus, Steph. *Hayling I.*
- Plegaderus dissectus, Er.\*
- Abræus globosus, Hoff.
- Acritus punctum, Aubé. *Hayling I.*

## NITIDULIDÆ

- Brachypterus gravidus, Ill. *Southampton*
- Epuræa decemguttata, Fab.
- Nitidula rufipes, L. *Netley*
- Omosita depressa, Linn.
- Thalycra sericea, Sturm. *Bournemouth*
- Meligethes ochropus, Sturm.
- pedicularius, Gyll.
- umbrosus, Sturm.
- Cryptarcha strigata, Fab.
- imperialis, Fab.
- Ips quadriguttata, Fab.
- quadripunctata, Herbst.
- Pityophagus ferrugineus, Fab.
- Rhizophagus perforatus, Er.
- cribratus, Gyll.
- politus, Hellw.

## TROGOSITIDÆ

- Thymalus limbatus, Fab.\*

## LATHRIDIIDÆ

- Anommatus 12-striatus, Wesm. *Southampton*
- Enicmus brevicornis, Mannh.\*
- Cartodere elongata, Curt.
- Corticaria umbilicata, Beck.

## CUCUJIDÆ

- Pediacus dermestoides, Fab.\*
- Læmophloeus bimaculatus, Payk.\*
- duplicatus, Waltl.
- Psammœchus bipunctatus, F. *Winchester*
- Silvanus unidentatus, F.

## CRYPTOPHAGIDÆ

- Diphyllus lunatus, F. *Netley*
- Diplocœlus fagi, Guér.\*\*
- Telmatophilus brevicollis, Auté.
- Antherophagus nigricornis, F.
- pallens, Gyll.
- silaceus, Herbst. *Bournemouth*
- Cryptophagus validus, Kr. *Southampton*

## SCAPHIDIIDÆ

- Scaphidium quadrimaculatum, Ol.
- Scaphisoma boleti, Panz.

## MYCETOPHAGIDÆ

- Litargus bifasciatus, F.
- Mycetophagus piceus, Fab.
- atomarius, Fab.
- quadriguttatus, Müll. *Portsmouth*
- multipunctatus, Hellw. *Netley*

# A HISTORY OF HAMPSHIRE

## DERMESTIDÆ

- Dermestes frischii, Kug.
- Megatoma undata, Er.
- Tiresias serra, Fab.
- Anthrenus claviger, Er. *Hampshire*

## BYRRHIDÆ

- Syncalypta spinosa, Rossi. *Portsmouth*
- Aspidiphorus orbiculatus, Gyll.

## PARNIDÆ

- Elmis nitens, Müll. *Hampshire*

## HETEROCERIDÆ

- Heterocerus sericans, Kies. *Lymington*
- lævigatus, Panz. *Southsea*

## LUCANIDÆ

- Lucanus cervus, Linn.
- Dorcus parallelipedus, Linn.
- Sinodendron cylindricum, Linn.

## SCARABEIDÆ

- Copris lunaris, Linn. *Bournemouth*
- Onthophagus taurus, Linn. *Fide Stephens*
- fracticornis, Payk.
- Aphodius putridus, Sturm.
- tristis, Panz.
- merdarius, F.
- conspurcatus, Linn.
- sticticus, Panz.
- Geotrupes vernalis, Linn.
- pyrenæus, Charp.
- Trox sabulosus, Linn.\*
- scaber, L.
- Hoplia philanthus, Füss.
- Rhizotragus solstitialis, L. *Southampton*
- Cetonia aurata, L.
- Gnorimus nobilis, Linn.

## BUPRESTIDÆ

- Anthaxia nitidula, Linn.\*\*
- Agrilus sinuatus, Ol.\*\*
- laticornis, Ill.
- angustulus, Ill.
- viridis, Linn.\*
- Trachys minuta, L. *Southampton*
- pumila, Ill. *Southsea*
- troglodytes, Gyll.

## THROSCIDÆ

- Throsus carinifrons, Bonv.
- dermestoides, L.
- obtusus, Curt. *Southsea*

## EUCNEMIDÆ

- Melasis buprestoides, Linn.
- Eucnemis capucina, Ahr.\*\*
- Microrrhagus pygmæus, Fab.\*

## ELATERIDÆ

- Cardiaphorus thoracius, Er. *Fide Stephens*
- Elatér sanguineus, Linn.\*
- lythropterus, Germ.\*
- sanguinolentus, Schr.
- miniatus, Gorch. = pomonæ, Steph.\*\*
- elongatulus, Fab.\*
- Megapenthes tibialis, Lac.
- Athöus rhombeus, Ol.\*

## ELATERIDÆ (continued)

- Agriotes sordidus, Ill. *Lymington*
- sobrinus, Kies.
- Sericosomus brunneus, Linn.
- Corymbites tessellatus, Fab.
- quercûs, Gyll.
- metallicus, Payk.
- Corymbites bipustulatus, Linn.

## DASCILLIDÆ

- Helodes marginata, F. *Southampton*
- Cyphon pallidulus, Boh.
- Scirtes hemisphæricus, Linn.

## TELEPHORIDÆ

- Podabrus alpinus, Payk.
- Telephorus fuscus, Linn.
- figuratus, Mannh.
- Rhagonycha testacea, Linn.
- Malthinus frontalis, Marsh
- Malthodes dispar, Germ.
- pellucidus, Kies.
- atomus, Thoms.
- Malachius æneus, Linn.
- Anthocomus fasciatus, L.
- Dasytes niger, Linn.\*\*
- Psilothrix nobilis, Ill. *Gosport*
- Haplocnemus impressus, Marsh
- nigricornis, Fab.
- Phlæophilus edwardsi, Steph. *Portsmouth*

## CLERIDÆ

- Tillus elongatus, Linn.
- (?) Trichodes apiarius, Linn.
- Necrobia violacea, L.

## DRILIDÆ

- Drilus flavescens, Rossi. *Winchester*

## PTINIDÆ

- Ptinus sexpunctatus, Panz.

## ANOBIIDÆ

- Dryophilus pusillus, Gyll.
- Anobium denticolle, Panz.
- fulvicorne, Sturm.
- Xestobium tessellatum, F.
- Ochina hederæ, Mull.
- Ernobius abietis, F.
- Xyletinus ater, Panz.
- Dorcatoma chrysomelina, Sturm.
- flavicornis, Fab.
- Anitys rubens, Hoff.

## BOSTRICHIDÆ

- Dinoderus substriatus, Payk. *Fide Stephens*

## SPHINDIDÆ

- Sphindus dubius, Gyll.

## CISSIDÆ

- Cis bidentatus, Ol.
- alni, Gyll.
- nitidus, Herbst.
- pygmæus, Marsh
- fuscatus, Mell.
- Eunearthron affine, Gyll.
- cornutum, Gyll.



# INSECTS

## PRIONIDÆ

*Prionus coriarius*, Linn.

## CERAMBYCIDÆ

*Aromia moschata*, L. *Southsea*

*Asemum striatum*, Linn.

*Callidium violaceum*, Linn.

— *variabile*, Linn.

*Clytus mysticus*, Linn.

*Gracilia minuta*, F. *Portsmouth*

(?) *Cerambyx heros*, Scop. „ *Dockyard*

*Pachyta cerambyciformis*, Schrank.

— *collaris*, Linn.

*Anoplodera sexguttata*, Fab.\*

*Leptura scutellata*, Fab.\*

— *fulva*, De G.

— *livida*, F.

*Strangalia aurulenta*, Fab.\*

— *nigra*, Linn.

*Grammoptera analis*, Panz.\*

— *præusta*, Fab.\*

## LAMIIDÆ

*Leiopus nebulosus*, L.

*Pogonochærus bidentatus*, Thoms.

*Lamia textor*, L. *Hampshire*

*Mesosa nubila*, Ol.\*

*Saperda populnea*, L. *Southampton*

*Stenostola ferrea*, Sch. „

## BRUCHIDÆ

*Bruchus cisti*, F. *Winchester*

— *canus*, Germ. „

— *atomarius*, L. *Portsmouth*

— *luteicornis*, Ill. *Portsmouth Hill, Portsmouth*

— *loti*, Payk.

— *villosus*, F. *Southampton*

## EUPODA

*Orsodacna lineola*, Panz.

*Donacia crassipes*, Fab.

— *versicolore*, Brahm.

— *limbata*, Panz.

— *bicolora*, Zsch.

— *thalassina*, Germ. *Portsmouth District*

— *impressa*, Payk.

— *clavipes*, F. *Portsmouth District*

— *affinis*, Kunze. *Winchester*

*Lema cyanella*, L. *Portsmouth District*

## CAMPTOSOMATA

*Clythra quadripunctata*, Linn.

*Cryptocephalus sexpunctatus*, L. *Southampton*

— *bipunctatus*, Linn, *var. lineola*, Fab.

— *biguttatus*, Scop.

— *aureolus*, Suffr.

— *hypochæridis* L. *Hampshire*

— *parvulus*, Müll. *Southampton*

— *moræi*, Linn.

— *bilineatus*, L. *Portsmouth District*

— *fulvus*, Goeze. *Hampshire*

— *pusillus*, F. *Bournemouth*

*Chrysomela marginalis*, Duft. *Southampton*

## CYCLICA

*Chrysomela banksi*, F. *Portsmouth District*

— *varians*, Schall.

— *goettingensis*, L. *Alverstoke*

— *didymata*, Scriba. *Portsmouth District*

— *hyperici*, Forst. *Southampton*

*Melasoma populi*, Linn.

— *longicollis*, Suffr.

*Phytodecta viminalis*, Linn.

— *rufipes*, De G. *Southampton*

— *olivacea*, Forst. *Portsmouth District*

*Phaedon concinnus*, Steph. „

*Hydrothassa hannoverana*, F. *Hampshire*

*Phyllobrotica quadrimaculata*, L.

*Luperus nigrofasciatus*, Goeze.

*Galerucella calvariensis*, Linn.

— *lineola*, F. *Portsmouth District*

*Adimonia tanacetii*, L. *Bournemouth*

*Longitarsus holsaticus*, Linn.

— *anchusæ*, Payk. *Portsmouth Hill*

— *ater*, F. *Portsmouth District*

— *absinthii*, Kuts. „

— *dorsalis*, F. „

— *atricillus*, L. „

— *tabidus* F., *var thapsi*, Marsh *Portsmouth District*

— *rutilus*, Ill. *Hayling I.*

— *lævis*, Duft.

*Haltica lythri*, Aubé.

— *ericeti*, All.

— *ampelophaga*, Guér.

*Phyllotreta nodicornis*, Marsh *Portsmouth District*

— *consobrina*, Curt.

— *atra*, Payk. *Portsmouth District*

— *vittula*, Redt. „ „

— *sinuata*, Steph. *Hampshire*

*Aphthona lutescens*, Gyll.

— *venustula*, Kuts. *Portsmouth District*

— *atrocærulea*, Steph. *Hayling I.*

*Apteropoda globosa*, Ill. *Portsmouth Hill*

*Podagrica fuscipes*, L. *Portsmouth District*

*Ochrosis salicariæ*, Payk.

*Epitrix atropæ*, Fendr. *Portsmouth Hill*

*Chætocnema subcærulea*, Kuts.

— *aridula*, Gyll. *Portsmouth District*

— *confusa*, Boh.

*Psylliodes dulcamaræ*, Koch

## CRYPTOSTOMATA

*Cassida murræa*, L. *Portsmouth District*

— *sanguinolenta*, L. „ „

— *fastuosa*, Schall.

— *vittata*, Vill. *Lymington*

— *vibex*, F.

— *chloris* Suffr. *Winchester*

— *nobilis*, Linn.

— *equestris*, Fab.

## TENEBRIONIDÆ

*Blaps similis*, Latr. *Hampshire*

*Heliopathes gibbus*, F. *Portsmouth*

# A HISTORY OF HAMPSHIRE

## TENEBRIONIDÆ (*continued*)

- Opatrum sabulorum, Gyll. *Portsmouth*  
 Microzoum tibiale, F. "  
 Phaleria cadaverina, Fab. *Bournemouth*  
 Heledona agaricola, F. *Hampshire*  
 Platydema dytiscoides, Rossi.\*\*  
 Scapidema metallicum, F. *Alverstoke*  
 Tenebrio obscurus, F. *Hampshire*  
 Gnathocerus cornutus, F. "  
 Tribolium ferrugineum, F. "  
 Palorus melinus, Herbst. "  
 Hypophloeus castaneus, F.  
 Helops cœruleus, L. *Portsea*

## CISTELIDÆ

- Cistela ceramboides, Linn.  
 Mycetochares bipustulata, Ill.\*

## MELANDRYIDÆ

- Tetratoma fungorum, Fab.  
 — desmaresti, Latr.  
 Orchesia micans, Panz.  
 Clinocara tetratoma, Thoms.  
 — undulata, Kraatz.  
 Conopalmus testaceus, Ol.\*  
 Melandrya caraboides, Linn.  
 — dubia, Schall.\*\*  
 Anisoxya fuscula, Ill.  
 Abdera quadrifasciata, Steph.  
 — bifasciata, Marsh  
 — flexuosa, Payk, *Hampshire*  
 Phlœotrya rufipes, Gyll.

## PYTHIDÆ

- Salpingus æratus, Muls.  
 Lissodema quadripustulata, Marsh  
 Rhinosimus ruficollis, Linn.  
 — viridipennis, Steph.

## CEDEMERIDÆ

- Cedemera lurida, Marsh *Portsea*  
 Nacerdes melanura, Schmidt *Portsmouth*  
 Ischnomera cœrulea, Linn.  
 — sanguinicollis, Fab.\*

## PYROCHROIDÆ

- Pyrochroa coccinea, Linn.

## SCRAPTIIDÆ

- Scraptia fuscula, Müll.

## MORDELLIDÆ

- Tomoxia biguttata, Gyll.\*  
 Mordella fasciata, Fab.  
 Mordellistena abdominalis, Fab.  
 — neuwaldeggiana, Panz.  
 — brunnea, F.  
 — parvula, Gyll, *var. inæqualis*, Muls.  
*Hampshire*  
 Anaspis rufilabris, Gyll.  
 — pulicaria, Costa.  
 — geoffroyi, Müll.  
 — flava, L.  
 — subtestacea, Steph.  
 — garneysi, Fowler

## RHIPIDOPHORIDÆ

- Metœcus paradoxus, L. *Netley*

## ANTHICIDÆ

- Notoxus monoceros, L. *Portsea*  
 Anthicus salinus, Crotch. *Lymington*  
 — humilis, Germ. "  
 — tristis, Schm., *var. Schaumi*, Woll.  
*Lymington*  
 — instabilis, Schmidt *Southampton*  
 — angustatus, Curt. *Portsmouth District*

## XYLOPHILIDÆ

- Xylophilus brevicornis, Perris.\*  
 — oculatus, Gyll.

## MELOIDÆ

- Meloë violaccus, Marsh *Hampshire*  
 Sitaris muralis, Forst.  
 Lytta vesicatoria, L. *Ringwood*

## PLATYRRHINIDÆ

- fasciatus, Forst. *Portsmouth*  
 Brachytarsus varius, Fab.  
 Tropideres niveirostris, Fab.  
 — sepicola, F.

## CURCULIONIDÆ

- Apoderus coryli, L. *Southampton*  
 Attellabus curculionoides, Linn.  
 Byctiscus betuleti, Thoms. *Southampton*  
 Rhynchites æneovirens, Marsh  
 — cupreus, L. *Hampshire*  
 — cœruleus, De G.  
 — interpunctatus, Steph.  
 — uncinatus, Thoms.  
 — pubescens, Fab.  
 Apion subulatum, Kirby, Rowner.

- genistæ, Kirby  
 — rubens, Steph.  
 — difforme, Germ. *Portsmouth*  
 — schonherri, Boh. "  
 — confluens, Kirby "  
 — sorbi, Fab.  
 — hookeri, Kirby  
 — vicinum, Kirby *Southampton*  
 — immune, Kirby  
 — spencei, Kirby *Hampshire*  
 — scutellare, Kirby *Bournemouth*  
 Otiorrhynchus scabrosus, Marsh *Portsmouth District*  
 — ligneus, Ol., Marsh *Portsmouth District*  
 — ligustici, L. *Hawley Flat, near Blackwater*

- rugifrons. *Portsmouth District*  
 Trachyploeus myrmecophilus, Seidt.  
*Southsea*

- aristatus, Gyll.  
 — squamulatus, Ol. *Portsmouth District*  
 — spinimanus, Serm. *Southsea*  
 — alternans, Gyll. "

- Cathormiocerus maritimus, Rye *Southsea*  
 Cænopsis fissirostris, Walt.  
 — waltoni, Schön.

- Strophosomus fulvicornis, Walt.  
 — faber, Herbst. *Southampton*  
 Brachysomus hirtus, Boh. *Southampton*



## INSECTS

### CURCULIONIDÆ (continued)

- Tropiphorus carinatus*, Müll. *Winchester*  
*Metallites marginatus*, Steph.  
*Polydrusus flavipes*, De G.  
 — *sericeus*, Schall. *Kimpton*  
 — *chrysomela*, Ol. *Lymington* and  
     *Bournemouth*  
 — *confluens*, Steph.  
*Tanymecus palliatus*, Fab.  
*Sitones cambricus*, Steph.  
 — *waterhousei*, Watt.  
*Gronops lunatus*, L. *Lymington*  
*Hypera arundinis*, Payk. *Portsmouth*  
 — *pollux*, F. *Portsmouth District*  
 — *suspiciosa*, Herbst. " "  
*Rhinocyllus latirostris*, Latr. *Hampshire*  
*Cleonus nebulosus*, L. *Bournemouth* and  
     *New Forest*  
 — *sulcirostris*, L. *Portsmouth*  
*Lixus bicolor*, Ol. *Portsmouth District*  
*Larinus carlinæ*, Ol.  
*Liparus coronatus*, Goeze. *Portsmouth Hill*  
     and *Hayling Island*  
*Lepyris binotatus*, Payk. *Minley* and  
     *Portsmouth District*  
*Pissodes notatus*, Fab. *Bournemouth*  
*Trachodes hispidus*, Linn.  
*Orchestes ilicis*, Fab.  
 — *avellanæ*, Don.  
 — *iota*, Fab.  
 — *stigma*, Germ. *Portsmouth District*  
 — *saliceti*, Payk. " "  
*Orthocætes setiger*, Bech. " "  
*Pseudostyphlus pilumnus*, Gyll. *Southsea*  
*Pachytychius hæmatocephalus*, Gyll.  
     *Portsmouth District*  
*Grypoidius equiseti*, F. *Portsmouth District*  
*Erihrinus seirpi*, F. " "  
 — *bimaculatus*, F. *Hayling Island* "  
*Thryogenes festucae*, Herbst.  
 — *nercis*, Payk.  
 — *scirrhosus*, Gyll.  
*Dorytomus pectoralis*, Gyll.  
 — *maculatus*, Marsh, *var. costirostris*,  
     Gyll. *Southsea*  
*Smicronyx jungermanniæ*, Reich.  
*Bagöus alismatis*, Marsh *Portsmouth Dist.*  
 — *argillaceus*, Gyll. *Southsea*  
 — *tempestivus*, Herbst. "  
 — *lutulosus*, Gyll. "  
 — *frit*, Herbst.  
 — *lutosus*, Gyll. *Southsea*  
 — *glabrirostris*, Herbst. "  
*Anoplus roboris*, Suffr. *Southampton*  
*Elleschus bipunctatus*, Linn.  
*Tychius quinquepunctatus*, Linn.  
 — *squamulatus*, Gyll.  
 — *schneideri*, Herbst. *Portsmouth District*  
 — *lineatulus*, Steph.  
 — *meliloti*, Steph. *Portsmouth District*

### CURCULIONIDÆ (continued)

- Tychius tomentosus*, Herbst. *Southampton*.  
 — *tibialis*, Boh. "  
 — *pygmæus*, Bris. "  
*Sibinia arenariæ*, Steph. *Lymington*  
 — *potentillæ*, Germ. *Southampton*  
 — *primitus*, Herbst. "  
 — *sodalis*, Germ. *Portsea Island*  
*Miarus campanulæ*, Linn.  
*Gymnetron beccabungæ*, Linn.  
 — *melanarius*, Germ.  
 — *rostellum*, Herbst.  
 — *pascuorum*, Gyll.  
 — *labilis*, Herbst. *Portsmouth District*  
 — *antirrhini*, Payk. *Southampton*  
*Mecinus collaris*, Germ. "  
 — *circulatus*, Marsh *Southsea*  
*Anthonomus chevrolati*, Desb.  
*Nanophyes lythri*, Fab.  
 — *gracilis*, Redt.  
*Cionus scrophulariæ*, L.  
 — *thapsus*, F. *Portsmouth*  
 — *hortulanus*, Marsh  
 — *pulchellus*, Herbst. *Southampton*  
*Orobitis cyaneus*, Linn.  
*Acalles ptinoides*, Marsh  
 — *roboris*, Curt. *Portsmouth District*  
 — *turbatus*, Boh. " "  
*Cœliodes rubicundus*, Herbst.  
 — *ruber*, Marsh  
 — *erythroleucus*, Gmel.  
*Ceuthorrhynchus chalybæus*, *Southampton*  
 — *constrictus*, Marsh *Portsmouth District*  
 — *cochleariæ*, Gyll. " "  
 — *hirtulus*, Germ. " "  
 — *geographicus*, Goeze. " "  
 — *viduatus*, Gyll. " "  
 — *picitarsis*, Gyll. " "  
 — *alliaræ*, Bris. " "  
 — *rapæ*, Gyll. " "  
 — *verrucatus*, Gyll. *Hayling Island*  
 — *resedæ*, Marsh *Portsmouth District*  
 — *urticæ*, Boh. " "  
 — *rugulosus*, Herbst. " "  
 — *chrysanthemi*, Germ. " "  
 — *marginatus*, Payk.  
 — *melanostictus*, Marsh  
*Ceuthorrhynchidius melanarius*, Steph.  
     *Lymington*  
 — *terminatus*, Herbst. *Portsmouth District*  
 — *dawsoni*, Bris. " "  
*Rhytidosomes globulus*, Herbst.  
*Amalus hæmorrhous*, Herbst. *Southampton*  
*Rhinoncus gramineus*, F. *Portsmouth Dist.*  
*Phytobius quadrinodosus*, Gyll. (*denticollis*,  
     Gyll. olim).  
 — *comari*, Herbst.  
 — *waltoni*, Boh. *Southsea*  
 — *quadrutuberculatus*, Fab.  
 — *canaliculatus*, Fahr.

## A HISTORY OF HAMPSHIRE

### CURCULIONIDÆ (*continued*)

- Litodactylus leucogaster, Marsh
- Balaninus turbatus, Gyll.
- Limnobaris T-album, L. *Portsmouth Dist.*
- villosus, F. *Portsmouth District*
- Baris laticollis, Marsh *Southampton*
- picicornis, Marsh *Portsmouth District*
- lepidii, Germ.                   "                   "
- Pentarthrum huttoni, Woll.   "                   "
- Magdalis phlegmatica, Herbst. *Southwick*
- armigera, Fourc. *Portsmouth District*
- cerasi, Linn.
- barbicornis, Latr.

### SCOLYTIDÆ

- Scolytus intricatus, Ratz.
- pruni, Ratz. *Southsea*

### SCOLYTIDÆ (*continued*)

- Scolytus multistriatus, Marsh
- Hylastes opacus, Er.
- angustatus, Herbst. *Bournemouth*
- palliatus, Gyll.
- Hylastinus obscurus, Marsh *Portsmouth District*
- Hylesinus crenatus, F.
- Phlæophthorus rhododactylus, Marsh
- Cryphalus fagi, Nord.
- Pityophthorus pubescens, Marsh
- Xylocleptes bispinus, Duft. *Portsmouth*
- Trypodendron domesticum, Linn.
- Xyleborus dryographus, Ratz.
- saxeseni, Ratz.
- Platypus cylindrus, Fab.

## LEPIDOPTERA

### RHOPALOCERA

#### *Butterflies*

The Wood White Butterfly (*Leucophasia sinapis*) is plentiful in some woods in the northern part of the county, especially near Basingstoke. It was formerly very abundant in the enclosed woods in the New Forest, but suddenly disappeared as a common insect about 1883, though a few specimens may still be found in the spring<sup>1</sup> about New Copse, Wood Fidley, and elsewhere in the south-eastern parts of the Forest. The Black-veined White Butterfly (*Pieris crataegi*) was formerly abundant, though local, in the Forest. In 1866, 1868, 1869, and 1870 it occurred in thousands about Butt's Lawn, Holme Hill and Puck Pits; between Boldrewood and Burley (in Oakleigh Enclosure); and in Warwickslade and Rhinefield; also more sparingly on the eastern side of the Forest, about Little Holme Hill and Denny. I caught a few specimens as late as 1878, and it is believed that the last stragglers were taken by my old friend, the late J. Jenner Weir, about 1883, between Vinney Ridge and Holmsley. Its disappearance cannot, I think, be attributed to over-collecting, because it was too widely distributed, and its sudden disappearance from Kent, and from Monmouthshire, and Glamorganshire about the same time—in which two last-named counties its range extended for some twelve miles—seems to confirm this view.<sup>2</sup>

The Common White Butterflies (*Pieris brassicæ*, *P. rapæ*, and *P. napi*) are plentiful throughout the district, but with the exception of the latter species, which is found in the woods, they are most abundant in and about gardens, fields, and other cultivated places. In the

<sup>1</sup> I have not seen specimens of the summer brood in the Forest for many years.—H. G.

<sup>2</sup> See article by H. Goss on *Aporia crataegi* in the *Entomologist's Monthly Magazine*, vol. xxiii. pp. 217–220, 1887.



## INSECTS

spring The Orange Tip (*Anthocharis cardamines*) is common both in the woods and lanes, and in the cultivated parts of the county. The Brimstone Butterfly (*Gonepteryx rhamni*) occurs in all parts of the county, but is especially abundant about the end of July in the enclosed woods of the New Forest, where its food plant, *Rhamnus frangula*, grows plentifully. The Clouded Yellow (*Colias edusa*), though a coast species, is occasionally met with in the southern parts of the Forest,<sup>1</sup> and in some seasons is generally distributed, together with the white variety (*C. helice*), in clover and lucerne fields, especially near the sea, and is often abundant on the cliffs and downs of the Isle of Wight. The Pale Clouded Yellow (*Colias byale*) also occurs, and is sometimes common, on the coast of the mainland, and in the Isle of Wight. Captain Savile Reid reports *C. edusa* as plentiful in the neighbourhood of Froyle (between Farnham and Alton) in 1892, when a specimen of the variety *C. helice* was taken, and also a single specimen of *C. byale*. The Silver-washed Fritillary (*Argynnis paphia*) is distributed in all the woods in the county, but it is especially characteristic of the New Forest, where it occurs in most seasons in great profusion in the enclosed woods, and also in the open Forest wherever the bramble is in flower, from the end of June to the end of July. Captain Reid has taken it in woods near Alton. There is a dark green, or nearly black, variety of the female of this species, known as var. *valexina*, which is almost confined to the New Forest, though reports of its capture have been received from the Forest of Bere and other parts of the county, and the captures of single specimens have also been recorded from North Sussex and Devon respectively. Although the type of this species is abundant in the Forest of Dean, Gloucestershire, and on the banks of the Wye, Monmouthshire, I have never seen a specimen of the var. *valexina* in either of those counties. The Dark Green Fritillary (*Argynnis aglaia*) is less common in the New Forest than on the open Chalk Downs of the county. It is, I think, the most universally distributed of the larger species of *Argynnis* in the United Kingdom, and I have met with it plentifully from Kent to Cornwall and also in Cumberland, Westmoreland and Lancashire. Some thirty years ago it occurred commonly in Brick-kilns Enclosure, and in adjoining fields near Bank, and also near Boldrewood, New Forest. This form was extremely dark in colour, being altogether unlike the Scotch specimens, or those I have collected in Cumberland, Westmoreland, Lancashire, Cornwall, Devonshire, Dorsetshire, Surrey, Sussex, or Kent. It still occurs in the New Forest, chiefly on thistle-heads about Holmsley and Wooton, and between Holmsley and Christchurch. I have not seen any specimens about Lyndhurst or Brockenhurst for many years past; but this may be the result of bad seasons. A specimen of the var. *charlotta* was taken in the Forest in 1870 by the late Rev. James Watson. The High Brown Fritillary (*Argynnis adippe*) is not uncommon

<sup>1</sup> It was abundant throughout the New Forest in 1877, when its variety *helice* was not uncommon.—H. G.

## A HISTORY OF HAMPSHIRE

in the county, occurring in most of the woods and on the heaths. It is far more common in the New Forest than *A. aglaia*, but never occurs in such profusion as *A. paphia*. I have taken it near Bournemouth and in all the woods about Lyndhurst and Brockenhurst, and also about Boldrewood and Burley, but it generally prefers the open heaths, especially where thistles are abundant.<sup>1</sup> The very rare Queen of Spain Fritillary (*Argynnis latbonia*) has occasionally been taken in the county. A capture of this species on Aug. 12th, 1899, on the highest part of the sandy beach at Highcliffe, in Christchurch Bay, was recorded by Mr. William Dale, of Southampton, in *The Times* of Aug. 16th, 1899, and Mr. Dale informs me that several other specimens were taken subsequently. The Pearl-bordered Fritillary (*Argynnis euphrosyne*) is common throughout the county, especially in the woods of the New Forest; but its congener, the Small Pearl-bordered Fritillary (*A. selene*), prefers the heaths, where it is often abundant. The Greasy Fritillary (*Melitæa artemis*) occurs in Woolmer Forest, also near Fleet, and in Parkhurst Forest, in the Isle of Wight. It has also been recorded from moist meadows near Fordingbridge. The Glanville Fritillary (*Melitæa cinxia*), although common in the Channel Islands, is confined in this country, at the present time, to the Isle of Wight, where it may be met with, sometimes in abundance, between St. Lawrence and Blackgang. The larvæ are gregarious, and the species, when met with, is usually plentiful. I have found it some seasons in great numbers near Niton. It is also recorded from Brooke, Freshwater, Carisbrooke, Sandown, and other parts of the Island, but does not occur on the mainland. The Small Tortoiseshell Butterfly (*Vanessa urticæ*) is common, chiefly in gardens, lanes, and by roadsides. The Large Tortoiseshell (*Vanessa polychloros*) occurs throughout the county, but is very common in the New Forest in some seasons, not only in the villages, where its larvæ feed upon willow, and apple, plum, and other orchard trees, but also in the Forest woods, especially about the keepers' and woodmen's cottages. Captain Reid says it is occasionally seen near Froyle. Mr. Fletcher once saw a specimen of the Camberwell Beauty (*Vanessa antiopa*) fly across the harbour from Hayling Island into Sussex; and he afterwards saw a specimen by the roadside between Beaulieu and Brockenhurst in the New Forest. A specimen was caught by Dr. Wallace at Bembridge, Isle of Wight, in 1856; and the late Mr. Samuel Stevens caught a specimen at Totland Bay, Isle of Wight, in 1888. The Peacock (*Vanessa Io*) is common in all parts of the county and in the Forest about the villages, and also in the woods on thistles. The Red Admiral (*Vanessa atalanta*) is also common throughout the county, especially in gardens, and the Painted Lady (*Vanessa cardui*) is also sometimes common in the more cultivated parts of the county, but I have not met with it in the New Forest.

<sup>1</sup> The capture in the Forest of a specimen of *Argynnis niobe*, not uncommon in many localities on the continent, was reported to have been made in 1868 by the late Mr. James Gerrard, of Lyndhurst. No captures in Hampshire have been since reported.—H. G.



## INSECTS

The White Admiral (*Limenitis sibylla*) occurs in many woods in the county, also in Parkhurst Forest in the Isle of Wight, but is nowhere so abundant as in the New Forest, where it may in some seasons be seen in thousands floating gracefully up and down the rides in the woods, or sitting on the blossoms of the bramble. In a fine season I have counted upwards of thirty on one bramble bush. The beauty of the under-side, and the elegance of its flight, render it one of the most attractive species to the lepidopterist. A variety is sometimes met with in which the white bands are wholly or partially wanting. The Purple Emperor (*Apatura iris*) occurs in many oak woods in the county, about Alton, Basingstoke, and elsewhere; but it is not abundant in the New Forest, although a considerable number of larvæ are taken in some seasons, and a few specimens of the perfect insect are seen every year, though not often caught unless sitting on the ground on excrement, or, after rain, in the ruts in the woods. Sometimes it is found on dead jays, or other birds in a state of decomposition, nailed to the trees near a keeper's lodge or woodman's cottage. I have taken specimens near Lyndhurst in Pond Head and Jones's Enclosures, in Rhamnor Enclosure, between Lyndhurst and Brockenhurst, also in Little Holme Hill Enclosure, and about Denny, Stubby Copse, and elsewhere in the southern and eastern parts of the Forest, but I have never seen it in the western or northern parts. The Marbled White Butterfly (*Arge galathea*) is locally abundant in many parts of the county, especially in the Isle of Wight, and also about Exbury, near the mouth of the Exe or Beaulieu River, and elsewhere on the coast of the mainland. In the New Forest I have only seen it in some of the enclosures on the eastern boundary, in Irons Hill Walk and Ashhurst Walk. The Wood Argus (*Satyrus egeria*) is common throughout the county in woods and lanes. The Wall (*Satyrus megæra*) is also common everywhere in lanes and by roadsides, though it is not so often met with in woods as the last named species. The Grayling (*Satyrus semele*) is common everywhere on the moors and heaths, especially on poor stony ground. It is also common about Winchester, the Isle of Wight, and elsewhere in the chalk district. The Meadow Brown (*Satyrus janira*) and the Large Heath (*Satyrus tithonus*) are everywhere abundant. The Ringlet (*Satyrus hyperanthus*) is common in woods throughout the county. In the New Forest a form occurs in which the ringlet spots on the under side are more elongated than in the type, and some specimens have the eye-like spots of a very large size. In the north of the county, near Thruxton, I have found in some woods a form in which the eye-spots are entirely absent, and are replaced by a range of white dots varying in size. The Small Heath (*Chortobius pamphillus*) is abundant throughout the county and the Isle of Wight, in fields, on heaths, chalk downs, and in woods. The Green Hair-streak (*Thecla rubi*) is generally distributed in the county. I have taken it commonly both in the Isle of Wight and the New Forest, about the end of May and beginning of June. The Purple Hair-streak (*Thecla quercus*) is common in all oak woods in the county, but it is a gregarious

## A HISTORY OF HAMPSHIRE

species, and often confines itself to two or three trees in a wood. Early in the morning it descends to the ground, and may be found sitting on the grass or on bramble bloom. Later in the day it ascends to an oak tree, and may be seen fluttering round, when disturbed, in companies of from twenty to a hundred, at about fifteen to thirty feet above the ground. Captain Reid has taken this species in woods near Alton. The Brown Hair-streak (*Thecla betulæ*) is common locally in many parts of the county. I have taken it near Liss, in August, on bramble bloom, and it also occurs in the north of the county, near Thruxton. In the New Forest it is common in the larval state in many localities where the blackthorn is abundant, but I have never met there with the insect in the perfect state. The Small Copper (*Polyommatus phlaeas*) is common throughout the county. Of the 'Blues' the Silver-studded Blue (*Lycæna ægon*) is abundant on heaths throughout the county, especially in the New Forest. The Brown Argus (*L. agestis*) is common in the chalk districts, and also occurs in some parts of the Forest. The Common Blue (*L. alexis*) is abundant throughout the county, preferring meadows and chalk hills to the heaths and woods. The Adonis Blue (*Lycæna adonis*), the Chalk Hill Blue (*L. corydon*), the Small Blue (*L. alsus*), are all plentiful on the chalk in the Isle of Wight, about Winchester, and elsewhere on the cretaceous formations in other parts of the county. The Holly Blue (*L. argiolus*) is generally distributed in the county, but is most commonly found where holly and ivy are abundant. I have met with it plentifully flying round the ivy on the ruins of Beaulieu Abbey, about the hollies in the Forest, and also near Niton and other parts of the Undercliff, in the Isle of Wight. The Duke of Burgundy (*Nemeobius lucina*) is common in woods in many parts of the county. In the New Forest it is local, but common in one or two enclosures in the extreme east and also in Stubby Copse, New Copse, and elsewhere in the south-east. Captain Reid reports that it is found in Froyle Woods. Of the *Hesperiidæ*, the Grizzled Skipper (*Syrichthus alveolus*) is common throughout the county, especially in and near woods. The Dingy Skipper (*Thanaos tages*) is abundant in most places, but prefers the chalk downs to the woods and heaths. The Large Skipper (*Hesperia sylvanus*) and the Small Skipper (*H. linea*) are both common everywhere throughout the county. The Silver-spotted Skipper (*H. comma*) is common in many places on the chalk about Winchester and the Isle of Wight. It has also been reported from the New Forest, but I have never seen it there.

### HETEROCERA

#### NOCTURNI

##### *Moths*

The Forester (*Prociæ statice*) is recorded from Winchester and various other parts of the county, and probably is found in the meadows, near Fordingbridge, where *M. artemis* occurs. The Five-spotted Burnet



## INSECTS

(*Zygæna trifolii*) occurs plentifully in many parts of the county, and also in the forests, in marshes, bogs, and on heaths, and I possess several curious varieties. It also occurs in the chalk district with *Zygæna loniceræ*. *Zygæna meliloti* is a characteristic species, resembling a stunted form of the last, but not occurring in any part of the United Kingdom except the New Forest. It was formerly plentiful in Park Hill Enclosure, between Rhamnor and Stubby Copse, but is now confined to a few localities in the south-east of the Forest, near New Copse and Brockenhurst. The Six-spotted Burnet (*Zygæna filipendulæ*)<sup>1</sup> is common throughout the county, both on the chalk hills and in meadows, heaths, etc. Mr. Fletcher reports the yellow form of the species from Winchester. The Eyed Hawk Moth (*Smerinthus ocellatus*), the Poplar Hawk Moth (*S. populi*), and the Lime Hawk Moth (*S. tilia*), all occur in the county, more or less commonly in the neighbourhood of villages and orchards. The Death's Head Hawk Moth (*Acherontia atropos*) occurs in many parts of the county, especially in potato fields. The Privet Hawk Moth (*Sphinx ligustri*) is common throughout the county, and I have found specimens in the New Forest villages on privet hedges. The Bedstraw Hawk Moth (*Deilephila galii*) is recorded for the New Forest, but I have never seen it there, though it no doubt occurs on the coast of the mainland and in the Isle of Wight. Mr. W. F. Rawnsley, J.P., of Park Hill, Lyndhurst, recently informed me that a perfect specimen of the rare Striped Hawk Moth (*Deilephila lineata*) was caught in his garden in June, 1888, by the Hon. D. Carnegie. The Little Elephant Hawk (*Chærocampa porcellus*) and the Large Elephant Hawk (*C. elpenor*) both occur in the county, the former chiefly in the chalk districts where its food plant, *Galium verum*, is abundant. The latter species occurs near rivers and streams, the larva feeding on willow herb and on the white bedstraw. The Humming-Bird Hawk Moth (*Macroglossa stellatarum*) is common throughout the county, especially in the Isle of Wight and the coast of the mainland. The Broad Bordered Clearwing (*Macroglossa fuciformis*) is common in most woods, hovering over *Ajuga reptans*, and is sometimes very plentiful in the New Forest, about the rhododendrons, near the lodges or cottages of the keepers and woodmen. The Narrow-Bordered Clearwing (*M. bombylifomis*) is not so common as the last, but may be taken in some numbers in the New Forest, hovering over *Ajuga reptans*, also about the flowers of rhododendrons. It is most plentiful in the south-eastern part of the Forest, near Stubby Copse and New Copse, where it seems attracted by the flowers of that local plant, *Pulmonaria angustifolia* (narrow-leaved lungwort). Its food plant is honeysuckle and devil's bit scabious. The small Clearwings are not very numerously represented, but *Sesia myopiformis* and *S. tipuliformis* occur about orchards and gardens. Mr. Fletcher has a specimen of *S. spbegiformis* taken near the Rifle Butts, Lyndhurst. *S. culiciformis* occurs in Park

<sup>1</sup> There is a black variety of this species which is extremely rare in this country. It is known as the var. *chrysanthemi*. I found a specimen sitting on a thistle in Warickslade, New Forest, in July, 1890.—H. G.

## A HISTORY OF HAMPSHIRE

Hill Enclosure, New Forest ; and *S. ichneumoniformis* is common on the coast of the Isle of Wight. The Leopard Moth (*Zeuzera æsculi*) and the Goat Moth (*Cossus ligniperda*) are both distributed in the county. The Golden Swift (*Hepialus hectus*) is common in woods at dusk, as well as *H. lupulinus* and *H. humuli*, the latter species being more confined to meadows and fields. *H. sylvinus* is also reported as occurring in the county. *Limacodes asellus* is a characteristic species of the Forest, and is rare elsewhere. *Limacodes testudo* is abundant in some parts of the New Forest, flying swiftly through the woods. Sometimes it may be observed in large numbers congregated round a beech tree. *Nola cucullatella*, *N. cristulalis*, and *N. strigula* all occur in the county. The latter is sometimes common in the New Forest on 'sugared' trees, and is one of the prizes of the district. Mr. Fletcher caught a specimen of *N. albulalis* near Freshwater ; and *N. centonalis* has been recorded from Bembridge, Isle of Wight. *Nudaria senex* is common in many of the Forest bogs, flying at dusk. *N. mundana* also occurs in the county. *Calligenia miniata* is common, especially in the New Forest, where it flies slowly and heavily in the glades of the woods at dusk. *Setina irrorella* occurs at Freshwater. *Lithosia mesomella* is common everywhere on the heaths. *L. aureola* is common in many places amongst oaks and larches. A specimen of *L. muscerda* was taken in Matley Bog, New Forest, by the Rev. R. Digby in 1888 ; and Mr. Fletcher believes that further specimens have since been taken in the same locality. *L. belvola* is also plentiful in many places, both on the trunks of firs and oak trees, or flying at dusk. *L. complana* and *L. complanula* also occur commonly. The former species is more local. I have found it near Denny, and also near Ringwood. *L. griseola*, one of the commonest species of the genus, is pretty generally distributed, as is also its var. *stramineola*. The Large Footman (*L. quadra*) is common in some seasons, and may be found sitting on the trunks of the oaks. It is fond of late hours, seldom coming to 'sugar' until after 12 p.m. The Red-necked Footman (*L. rubricollis*) is also common throughout the county, especially in the New Forest, and sometimes early in the morning it will be found sitting on the ferns, but later in the day it may be seen swarming round the tops of the trees. *Eulepia cribrum* is one of the most interesting species in the county, and it is not found in any part of the United Kingdom except on the moors, some two or three miles south of Ringwood, in one or two places within the bounds of the New Forest, near Bournemouth, and in the Isle of Purbeck, Dorset. It flies at dusk, but may be disturbed from the heath in the daytime. The beautiful *Deiopeia pulchella* has been taken in the New Forest, and also on the coast of the mainland and in the Isle of Wight. The Cinnabar (*Euchelia jacobææ*) is common everywhere where the ragwort grows, especially in the larval state. That handsome species, the Scarlet Tiger (*Callimorpha dominula*) used to occur near Ringwood, but I have not heard of any captures in recent years. It has also been recorded from Winchester. The Clouded Buff (*Euthemonia russula*) is common all over the heaths throughout the



## INSECTS

county, especially in the New Forest, and in the bordering parts of Dorsetshire. The Wood Tiger (*Chelonia plantaginis*)<sup>1</sup> occurs in most parts of the county in the spring, flying briskly in the woods. The Garden Tiger (*C. caia*) is found everywhere in the county, especially in gardens and other cultivated parts of the district. I have seen a few specimens of the Cream-spot Tiger (*C. villica*) in the New Forest, but I do not know of any locality there where it is especially plentiful. It is not uncommon on the coast of the Isle of Wight. The Ruby Tiger (*Arcta uliginosa* and the Ermines (*A. mendica*, *A. menthastri*, and *A. lubricipeda*) all occur in the county, and the two latter are universally common. The Brown-Tail Moth (*Liparis chrysorrhæa*), though not generally distributed, is occasionally common, and being gregarious is frequently met with, plentifully if at all, especially if the collector happens to have about him a virgin female. The Yellow-Tailed Moth (*L. auriflua*) is common throughout the county, and, like the last, gregarious in its habits. The Black Arches (*L. monacha*) occurs in woods in many parts of the county, and is in some seasons very common in the New Forest. The larvæ feed on oak, and the perfect insect is found resting on the trunks of the same tree. The Pale Tussock (*Orgyia pudibunda*), though not so common as in Kent and in some other parts of the United Kingdom, is not uncommon in the New Forest, especially in the larval stage. It is known as the 'Hop Dog' in Kent. The Dark Tussock (*D. fascelina*) also occurs in the county. The Vapourer (*O. antiqua*) is common everywhere. *Demas coryli* occurs generally in beech woods, especially in the New Forest. *Trichiura cratægi*, *Pæcilocampa populi*, *Eriogaster lanestris*, *Bombyx neustria*, *B. rubi*, *B. trifolii*, *B. quercus*, *Odonestis potatoria*, *Lasiocampa quercifolia*, and *Saturnia carpini*, all occur in the county. The Lackey (*Bombyx neustria*) is frequently a pest, in the larval stage, in orchards and gardens, destroying the fruit trees. *B. trifolii* is common in the larval state on heaths near Lyndhurst, and occurs also in Hayling Island. The Emperor (*Saturnia carpini*) is common on all the heaths, but the males can be obtained more plentifully if the collector has with him two or three virgin females. The larva of this species is very beautiful.

## GEOMETRÆ

*Urapteryx sambucata* is everywhere common throughout the county. I have seen one or two specimens of *Epione vespertaria* taken near Emery Down, in the New Forest; and Stainton, in his Manual, gives Lyndhurst as one of its localities, but with the exception above-mentioned, I have never seen it in the Forest. *E. apiciaria* is common in many parts of the county. *E. advenaria* occurs at Woolmer amongst bilberry, in the New Forest, at Froyle, and in other parts of the county. *Rumia*

<sup>1</sup> Captain Reid records it from the woods near Froyle.—H. G.

## A HISTORY OF HAMPSHIRE

*cratægata* is abundant everywhere. The pretty little *Venilia maculata* is common in all the woods of the county during the month of May. The beautiful *Angerona prunaria* occurs in many localities in the county, especially in the New Forest. *Metrocampa margaritata* (the light Emerald) is everywhere common. *Ellopia fasciaria* is common throughout the county, especially in the fir woods, sitting on the tree trunks, or flying at dusk. The Scorched Wing (*Eurymene dolobraria*) is common on heaths throughout the county, especially in the New Forest and at Wolmer. *Pericallia syringaria* occurs in many parts of the county, but chiefly in the New Forest. *Selenia illunaria*, *S. lunaria*, and *S. illustraria*, *Odontopera bidentata*, *Crocallis elinguaris*, *Ennomos tiliaria*, *E. fuscantaria*, *E. erosaria*, and *E. angularia*, all occur throughout the county. *E. fuscantaria* is common in the neighbourhood of Southampton, *E. erosaria* in the New Forest, and *E. angularia* is common everywhere. *Himera pennaria*, *Phigalia pilosaria*, *Nyssia hispidaria*, *Amphidasis prodromaria*, and *A. betularia*, *Hemerophila abruptaria*, *Cleora viduaria*, *C. glabraria*, and *C. lichenaria*, occur in the county. *C. viduaria* was formerly not uncommon in the New Forest, but it is now very rare there. *C. glabraria* is one of the typical New Forest species, occurring plentifully, especially on the lichen-covered oaks and beeches, in the eastern parts of the Forest, about Denny and Stubby Copse, and west of Lyndhurst along the Christchurch Road. *Boarmia repandata*, *B. rhomboidaria*, *B. abietaria*, *B. cinctaria*, *B. roboraria*, and *B. consortaria* are all distributed throughout the county; and the variety *conversaria* of *B. repandata* is not uncommon in the New Forest. *B. abietaria* is common in many parts of the New Forest, on the trunks of the firs, and *B. cinctaria*, which is hardly met with elsewhere, is plentiful in certain localities near Lyndhurst and Brockenhurst. *B. roboraria*, the largest of the Geometridæ, is quite a characteristic New Forest moth. I have never seen it so commonly in any other part of the United Kingdom. It is fond of early rising, and I have frequently taken it at daybreak off the stems of the oak. *Tephrisia consonaria*, *T. biundularia*, *T. crepuscularia*, *T. extersaria*, and *T. punctulata* are all distributed over the county. *T. extersaria* is especially plentiful in the New Forest, on the trunks of the firs. *Gnophos obscurata* is very common both in the chalk districts about Winchester and in the Isle of Wight, and also in the New Forest and elsewhere on heaths. In the former districts the form is greyish-white, resembling the soil on which it is fond of sitting, whereas in the New Forest, on the peat, it assumes an almost black colour. The Grass Emerald (*Pseudoterpna cytisaria*) is common everywhere on the heaths and moors in the county. The Great Emerald (*Geometra papilionaria*) occurs not infrequently in the neighbourhood of Brockenhurst, Froyle, and elsewhere in the county. The beautiful Little Emerald (*Nemoria viridata*) occurs in many parts of the county, especially near Beaulieu and near Brockenhurst. *Iodis vernaria* is common in the chalk district, and near Froyle, and *I. lactearia* is abundant throughout the county. *Phorodesma bajularia* and *Hemithea thymiaria* are common



## INSECTS

throughout the county in oak woods. *Ephyra porata*, *E. punctaria*, *E. trilinearia*, *E. omicronaria*, *E. orbicularia*, and *E. pendularia*, all occur in the county. *E. trilinearia* is common in the beech woods, and *E. omicronaria* is generally found among maple. The beautiful little *Hyria auroraria* flies over the heaths in July in many parts of the county, and differs very much in colour from the specimens I have collected in the Fens, and also from those which I have taken in Westmoreland and North Lancashire. It is locally common in the New Forest, but it is not generally distributed. *Astbena luteata*, *A. candidata*, and *A. sylvata*, all occur in the county. *Eupisteria beparata* is not uncommon on the moors among bog myrtle and alders. It may be taken nearly everywhere amongst alder-bushes in the New Forest. *Acidalia scutulata*, *A. bisetata*, *A. trigeminata*, *A. osseata*, *A. humiliata*, *A. incanaria*, *A. ornata*, *A. promutata*, *A. straminata*, *A. subsericeata*, *A. immutata*, *A. remutata*, *A. imitaria*, *A. emutaria*, *A. aversata*, and *A. emarginata*, all occur in the county. *A. ornata* is a chalk species, and is not to be met with on the moors. It is not uncommon in the Isle of Wight and other parts of the chalk districts. *A. humiliata* and *A. promutata* also occur in the Isle of Wight. *A. straminata* is a New Forest species, and is locally abundant near Lyndhurst on the heaths at dusk. *A. emutaria* is also a New Forest species, and flies in one or two bogs in the neighbourhood of Brockenhurst and Lyndhurst about dusk. It also occurs at Yarmouth, Isle of Wight.

*Timandra amataria*, *Cabera pusaria*, *C. exanthemaria*, *Corycia temerata*, *C. taminata*, and *Aleucis pictaria* are generally distributed. *Macaria alternata* is not uncommon in the New Forest amongst alders. *M. notata* also occurs, and *M. liturata* is common in the fir woods of the county, especially in the New Forest. *Halia wavararia*, *Strenia clathrata*, *Panagra petraria*, and *Numeria pulveraria* are common throughout the county. *Scodiona belgiaria* and *Selidosema plumaria* are common in many places on the heaths. They both occur on the heaths between Lyndhurst and Beaulieu, and also in other parts of the Forest. *Fidonia atomaria* is common on every heath in the county, and *F. piniaria* is equally common in all the fir woods. *Minoa euphorbiata* is common throughout the county, especially where the wood spurge is abundant. *Aspilates strigillaria* and *A. citraria* are both common in the chalk districts, and the former is also abundant on the heaths. *Abraxas grossulariata* is common in gardens, sometimes stripping the gooseberries of their leaves. *Ligdia adustata* and *Lomaspilis marginata* are both generally distributed throughout the county.

*Pachynemia hippocastanaria* is common on all the heaths. *Hybernia rupicapraria*, *H. leucophæaria*, *H. aurantiaria*, *H. progemmaria*, *H. defoliaria*, *Anisopteryx æscularia*, *Cbeimatobia brumata*, *Oporabia dilutata*, *Larentia didymata*, *L. multistrigaria*, *L. pectinitaria*, *Emmelesia affinitata*, *E. alchemillata*, *E. albulata*, *E. decolorata*, and *E. unifasciata* are generally distributed, though of course more abundant in some parts of the county than in others. Of the 'Pugs,' the county includes *Eupithecia*

## A HISTORY OF HAMPSHIRE

*linariata*, *E. pulchellata*, *E. centaureata*, *E. isogrammata*, *E. castigata*, *E. albipunctata*, *E. pimpinellata*, *E. indigata*, *E. absynthiata*, *E. minutata*, *E. tenuiata*, *E. abbreviata*, *E. pumilata*, *E. coronata*, *E. subnotata*, *E. lariciata*, *E. valerianata*, *E. irriguata*, *E. fraxinata*, *E. nanata*, *E. vulgata*, *E. assimilata*, *E. dodoneata*, *E. exiguata*, *E. togata*, and *E. rectangulata*. *E. linariata* is common in many places, and can be taken freely. *E. lariciata* is abundant in the fir woods of the county. *E. pulchellata* is common amongst foxglove. *E. irriguata* is a typical New Forest species, and I am not aware of its capture in any other part of the United Kingdom ; but Mr. Fletcher says it occurs near Granvilles Wootton, Dorsetshire. *E. nanata* is common everywhere on the heaths. *E. dodoneata* occurs in the oak woods of the New Forest. *E. rectangulata* is more frequently met with in gardens and orchards. *Collix sparsata* is common amongst alders in the bogs, and the larva feeds on *Lysimachia vulgaris*. *Lobophora sexalisata*, *L. viretata*, *L. lobulata*, and *L. polycommata* all occur in the county. *Thera juniperata*, *T. simulata*, *T. variata*, and *T. firmata* also occur, especially among junipers and firs.

*Hypsipetes ruberata*, *H. impluviata*, *H. elutata*, *Melanthia rubiginata*, *M. ocellata*, and *M. albicillata* are all generally distributed. With the exception of one or two specimens of *Melanippe bastata*, in Ironshill Walk in the New Forest, I have not met with this species in the county. *M. procellata* is a chalk species. *M. rivata*, *M. subtristata*, *M. montanata*, *M. galiata*, and *M. fluctuata* occur throughout the county. Also *Anticlea rubidata*, *A. badiata*, and *A. derivata*. *Coremia propugnata*, *C. ferrugata*, and *C. unidentaria* are generally distributed. *Camptogramma bilineata* is abundant everywhere, but *C. fluviala* is represented by a single specimen taken near Lyndhurst by Mr. Fletcher. *Phibalapteryx tersata*, *P. lignata*, and *P. vitalbata* occur in the Isle of Wight and other parts of the chalk districts near Andover and Thruxton. *Scotosia dubitata*, *S. vetulata*, *S. rhamnata*, *S. certata*, and *S. undulata* all occur in various localities. *Pelurga comitata*, *Cidaria psittacata*, *C. miata*, *C. corylata*, *C. russata*, *C. immanata*, *C. silaceata*, *C. testata*, *C. populata*, *C. pyraliata*, *C. picata*, *C. suffumata*, *C. fulvata*, and *C. dotata* have all been found in the county. *Eubolia cervinaria*, *E. mensuraria*, *E. palumbaria*, *E. bipunctaria*, and *E. lineolata* are generally distributed ; *E. palumbaria* being especially abundant on the heaths, *E. mensuraria* everywhere, and *E. lineolata* on the chalk hills. *Anaitis plagiata* is common in woods throughout the district. *Cbesias spartiata* occurs wherever broom is abundant. *Tanagra chærophyllata* is abundant everywhere among common ferns ; its larva feeds on *Bunium flexuosum*.

### DREPANULÆ

*Platypteryx lacertula*, *P. falcula*, *P. hamula*, and *P. unguicula*, all occur in the county. *P. hamula* is generally found in the oak forests



## INSECTS

and woods, and *P. unguicula* is more plentiful among the beeches. *Cilix spinula* is very generally distributed.

### PSEUDO-BOMBYCES

The Kittens, *Dicranura furcula* and *D. bifida*, and the Puss, *D. vinula*, all occur in the county, and the latter is very common. The Lobster Moth (*Stauropus fagi*) occurs in most of the beech woods in the New Forest. It is sometimes not uncommon, especially on the stems of the beeches, from which its larvæ can generally be dislodged at the proper season. *Petasia cassinea* is also common throughout the county, as well as the Buff Tip (*Pygæra bucephala*). *Clostera curtula*, *C. reclusa*, *Ptilodontis palpina*, *Notodonta camelina*, *N. dictæa*, *N. dictæoides*, *N. dromedarius*, *N. ziczac*, *N. trepida*, *N. chaonia*, and *N. dodonæa* all occur in the county. *N. dictæoides* is constantly met with in the New Forest on the birches, as well as *N. dromedarius* and *N. ziczac*, *N. trepida*, *N. chaonia* and *N. dodonæa* are frequently taken on the stems of the oaks, from which trees the larvæ may be obtained. *Diloba cæruleocephala* is universally distributed throughout the county, and the larvæ frequently occur in great numbers on the white thorn.

### NOCTUÆ

*Thyatira derasa* and *T. batis* are common in the county, especially in the New Forest, and come freely to 'sugar.' *Cymatophora duplaris*, *C. diluta*, *C. flavicornis*, and *C. ridens*, all occur in the county. *C. flavicornis* and *C. ridens* are common in some seasons in the New Forest. *Bryophila glandifera* has been taken at Christchurch, and *B. perla* is universally distributed. *Diphthera orion* occurs in some years in the New Forest and in other oak woods in the county. In 1875 it was especially abundant in the New Forest, at 'sugar.' I have seen fourteen or fifteen specimens on one oak tree. *Acronycta tridens*, *A. psi*, *A. leporina*, *A. aceris*, *A. megacephala*, *A. ligustri*, *A. alni*, and *A. rumicis* all occur throughout the county. *A. alni* is one of the typical species of the New Forest, and may be taken at 'sugar,' and also, in the larval state, from the alders. In its earlier state, the larvæ resemble bird's dung. *Leucania turca*, *L. lithargyria*, *L. vitellina*, *L. albipuncta*, *L. littoralis*, *L. pudorina*, *L. comma*, *L. impura*, and *L. pallens* all occur in the county. *L. turca* used to be one of the most abundant Noctuæ in the New Forest, and could be taken on 'sugar' about the end of June; but of late years it has not been so common. *L. lithargyria* is, of course, a common species. *L. albipuncta* has been taken in some numbers by the late Mr. J. G. Ross and others, in woods near Freshwater, at 'sugar'; and *L. vitellina* has been taken in the Forest by Mr. G. Tate. *L. lit-*

## A HISTORY OF HAMPSHIRE

*toralis* is common on the coast of the Isle of Wight, and on the cliffs about Bournemouth and elsewhere. *L. pudorina*, *L. impura*, and *L. pallens* are all common enough in the bogs and marshes of the county.

*Nonagria despecta*, *N. geminipuncta*, *N. fulva*, *N. typhæ*, and *N. lutosa* occur throughout the county, or in the Isle of Wight, as well as *Gortyna flavago* and *Hydræcia nictitans*, *H. petasitis* and *H. micacea*.

*Axylia putris*, *Xylophasia rurea*, *X. alopecurus*, *X. lithoxylea*, *X. polyodon*, *X. hepatica*, *X. scolopacina*, *Dipterygia pinastri*, *Aporophyla australis*, *Neurea saponariæ*, *Heliophobus popularis*, *Chareas graminis*, *Cerigo cytherea*, *Luperina testacea*, *L. cæspitis*, *Mamestra*<sup>1</sup> *anceps*, *M. furva*, *M. brassicæ*, *M. persicariæ*, *Apamea basilinea*, *A. gemina*, *A. oculatea*, *A. fibrosa*, *Miana strigilis*, *M. literosa*, *M. furuncula*, *M. arcuosa*, *Celæna haworthii* and *Grammesia trilinea* are all Hampshire species. *Acosmetia caliginosa* is one of the most interesting species in the county, being confined, as far as I am aware, to the New Forest. It used to occur in the rides of Park Hill Enclosure, between Rhamnor and Stubby Copse; but has for some years past disappeared therefrom, and now only occurs in a few localities near Brockenhurst.

*Caradrina morpheus*, *C. alsines*, *C. blanda*, *C. cubicularis*, and *Rusina tenebrosa* are of general distribution; and *C. ambigua* has been taken in some numbers at Freshwater, Isle of Wight, and two have been taken in the New Forest by Mr. W. J. Cross. *Agrotis valligera*, *A. puta*, *A. suffusa*, *A. saucia*, *A. segetum*, *A. lunigera*, *A. exclamationis*, *A. corticea*, *A. cinerea*, *A. cursoria*, *A. nigricans*, *A. tritici*, *A. aquilina*, *A. obelisca*, *A. agathina*, *A. porphyrea*, and *A. ravida* all occur in the county. *A. lunigera* is chiefly found in the south of the Isle of Wight, and *A. agathina* and *A. porphyrea* are common on the heaths in many parts of the county. *Tryphæna ianthina*, *T. fimbria*, *T. interjecta*, *T. subsequa*, *T. orbona*, and *T. pronuba* all occur in the county. *T. fimbria* is very common on 'sugar' in the New Forest. Two forms of it occur—one with light yellowish-brown fore wings, and the other in which the fore wings are dark; the deep black border in the outer margin of the yellow hind wings renders it one of the handsomest of the British Noctuæ. *T. subsequa* is a New Forest species, and I am not aware of its capture commonly elsewhere in England, though it has been taken in plenty at Forres, N.B. It is constantly taken in Irons Hill Enclosure in the eastern part of the Forest, and also in Park Grounds Enclosure, Rhamnor Enclosure, and other parts of the southern and eastern districts. *T. ianthina*, *T. orbona* and *T. pronuba* are so universally distributed as not to require any notice as to localities. *Noctua glareosa*, *N. augur*, *N. plecta*, *N. c-nigrum*, *N. triangulum*, *N. rhomboidea*, *N. brunnea*, *N. festiva*, *N. dahlîi*, *N. rubi*, *N. umbrosa*, *N. baja*, *N. castanea* (*neglecta*), and *N. xanthographa* are all more or less common in the county. *N. rhomboidea* is more common in the New Forest than elsewhere, and *N. plecta*, *N. c-nigrum*, *N. triangulum*, *N. brunnea*, *N. festiva*, *N. rubi*, *N. neglecta*,

<sup>1</sup> Mr. Fletcher thinks that *Mamestra abjecta* has occurred in Hampshire. He says the specimens described by Buckler (*E. M. M.*, xvi. p. 93), and bred by him, are in his cabinet.



## INSECTS

and *N. xanthographa* are common everywhere, *N. c-nigrum*, *N. festiva*, and *N. xanthographa* being frequently pests. *Trachea piniperda* is abundant in the fir woods of the county. *Tæniocampa gothica* is common throughout the county, also *T. rubricosa*, *T. instabilis*, *T. stabilis*, *T. gracilis*, *T. miniosa*, *T. munda* and *T. cruda*, *Orthosia upsilon*, *O. lota* and *O. macilenta*, *Anchocelis rufina*, *A. pisticina*, *A. lunosa*, *A. litura*, *Cerastis vaccinii* and *C. spadicea*, *Scopelosoma satellitia*, *Dasycampa rubiginea*, *Oporina croceago*, *Xanthia citrargo*, *X. cerago*, *X. silago*, *X. aurago*,<sup>1</sup> *X. gilvago* and *X. ferruginea*, *Girrbædia xerampelina*, *Tetbea subtusa* and *T. retusa* and *Dicycla oo* all occur in the county. The last named species is generally very rare, but occurs in some seasons in the New Forest in abundance. In 1871 it was most abundant on the 'sugared' trees about Clay Hill near Lyndhurst, and in Hollands Wood near Brockenhurst. Since then hardly a specimen has been taken. *Cosmia trapezina*, *C. diffinis*, and *C. affinis* are generally distributed. *Eremobia ochroleuca* occurs on the southern coast of the Isle of Wight. The genus *Dianthecia* is not strongly represented; but the common species occur in the county, and *D. albimacula* has been taken at Gosport. *Hecatera dysodea* and *H. serena*, *Polia chi* and *P. flavocincta*, *Epunda lutulenta*, *E. nigra*, *E. viminalis* and *E. lichenea*, *Miselia oxyacanthæ*, *Agriopsis aprilina*, *Phlogophora meticulosa*, *Euplexia lucipara*, *Aplecta herbida*, *A. nebulosa*, *A. tincta* and *A. advena*, *Hadena adusta*, *H. protea*, *H. dentina*, *H. chenopodii*, *H. suasa*, *H. oleracea*, *H. pisi*, *H. thalassina*, *H. contigua*, *H. genistæ*, *Xylocampa lithorbiza*, *Calocampa vetusta* and *exoleta*, *Xylina rhizolitha*, *X. semibrunnea* and *X. petrificata*, *Cucullia verbasci*, *C. scrophulariæ*, *C. lychnitis*, *C. chamomillæ* and *C. umbratica* all occur in the county. *Heliothis marginata*, *H. peltigera* and *H. dipsacea* are also to be met with, the last named species is common on many of the heaths, especially between Lyndhurst and Beaulieu, but it is a powerful flier, and more often seen than caught. *Anarta myrtilli* (the beautiful Yellow Underwing) is common throughout the county on heaths; but like the last species is not easy to capture. *Heliodes arbuti* is common in many places in meadows, and *Acontia luctuosa* has been taken in the Isle of Wight. *Erastria fuscula* is abundant in woods, especially in the New Forest; and *Hydrelia unca* is common in bogs in many parts of the county, especially between Lyndhurst and Beaulieu, and near Brockenhurst. *Micra parva* and *M. paula* have been recorded from Freshwater. *Brepbos parthenias* occurs everywhere in the early spring amongst the birch trees. *Habrastola urticæ* and *H. triplasia*, *Plusia chrysis*, *P. iota*, *P. v-aureum* and *P. gamma* are generally distributed, and of recent years *P. moneta*<sup>2</sup> has been taken in the county. *Gonoptera libatrix*, *Amphipyra pyramidea* and *A. tragopogonis*, *Mania typica* and *M. maura*, *Toxocampa pastinum*, *Stilbia anomala*, *Catocala nupta*, *C. promissa* and *C. sponsa* all occur in the county. *A. pyramidea* is very common in the New Forest and elsewhere at 'sugar.' The Red Underwing (*C.*

<sup>1</sup> Captain Reid informs me that this species was common at 'sugar' near Froyle in the autumn of 1891.—H. G.

<sup>2</sup> Captain Reid took a specimen near Froyle, at light, in July, 1892.—H. G.

## A HISTORY OF HAMPSHIRE

*nupta*) is everywhere plentiful in the autumn, especially near willows and poplars, and the Crimson Underwings (*C. promissa* and *C. sponsa*) are two of the chief attractions to the lepidopterist in the New Forest, coming freely to 'sugar' about the end of July and beginning of August, especially about Hurst Hill near New Park, between Lyndhurst and Brockenhurst, Hollands Wood, near Brockenhurst, Irons Hill Enclosure on the eastern side of the Forest, Halliday Hill Enclosure and elsewhere in Boldrewood Walk, and also in the northern part of the Forest, between Lyndhurst and Cadenham, especially in Furzy Lawn Gate Enclosure towards Bartley Water, and elsewhere throughout the district towards Totton. Both species frequently come to "sugar" before dusk. *C. promissa* generally appears ten days or a fortnight before *C. sponsa*, and is more active on the wing, generally sitting with the wings expanded, showing the brilliant crimson of the hind wings, and usually darting off on the first glimmer of the lantern. *C. sponsa* is much more sluggish, generally sitting on the trees with the fore wings overlapping and concealing the crimson hind wings. It is much more easily taken than the last named species. *Euclidia mi* and *E. glyphica*, and *Phytometra ænea* are common throughout the county, the two latter being especially common in the rides in the woods and on the heaths.

### DELTOIDES, PYRALIDES AND CRAMBITES<sup>1</sup>

The following species all occur in the county either in the chalk districts or on the heath and forest lands :—

#### DELTOIDES

*Hypena proboscidalis*. Common  
 — *rostralis*. *New Forest*, not common  
*Madopa salicalis*. Mr. C. G. Barrett used to take this at *Haslemere*  
*Hypenodes costæstrigalis*. Abundant in woods, *New Forest*  
*Rivula sericealis*. *New Forest*, not uncommon  
*Schrankia turfosalis*. *New Forest*, abundant in some of the bogs  
*Herminia barbalis* }  
 — *tarsipennalis* } In *New Forest*  
 — *grisealis* }  
 — *cribralis*. Bogs near *Lyndhurst*  
*Aventia flexula*. *New Forest*

#### PYRALIDES

*Pyralis fimbrialis*  
 — *farinalis*  
 — *glaucinalis*. *New Forest*  
*Aglossa pinguinalis*  
*Cledeobia angustalis*  
*Pyrausta punicealis*. *Shanklin, Isle of Wight*  
 — *purpuralis*. *New Forest, Shanklin, I. W.*

*Pyrausta ostrinalis*. *New Forest, Afton Down, Isle of Wight*, abundant  
*Herbula cespitalis*. Very common, *N. Forest, Hayling, Isle of Wight*  
*Ennychia cingulalis*. *Afton Down, Isle of Wight*, abundant  
 — *octomaculalis*  
*Diasemia literalis*. Recorded for *New Forest* in *Baker's List* and in *Stainton's Manual*  
*Endotricha flammealis*. Abundant in *N. F.*  
*Stenia punctalis*. *Freshwater*  
*Cataclysta lemnalis*  
*Paraponyx stratiotalis*  
*Hydrocampa nymphaealis*. Swarms in *N. F.* bogs  
 — *stagnalis*  
*Botys lupulinalis*. *Sandown, Isle of Wight. (Manual, ii. 148)*  
 — *pandalis*. Abundant in *New Forest*  
 — *flavalis*. Swarms on *Freshwater Down, Isle of Wight*  
 — *verticalis*. Everywhere common among nettles  
 — *lancealis*. *New Forest* among *Eupatorium*  
 — *fuscalis*. Very common in *Isle of Wight* among *Rhinanthus crista-galli*

<sup>1</sup> This list has been compiled by Mr. W. H. B. Fletcher.—H. G.



## INSECTS

- Botys urticalis*. Abundant among nettles  
 — *asinalis*. Near *Freshwater, Isle of Wight*, among *Rubia peregrina*  
 — *Ebulea crocealis*  
 — „ *verbascalis*. *New Forest*, rare  
 — „ *sambucalis*  
*Pionea forficalis*. A common garden insect  
*Spilodes sticticalis*. Recorded in *Baker's List*, and corrected by the late Fredk. Bond  
 — *cinctalis*. *New Forest, St. Helens, Isle of Wight*, not common  
*Scopula prunalis*. *New Forest*, abundant  
 — *ferrugalis*. *N. F. and I. of W.*, common  
*Stenopteryx hybridalis*. Very common everywhere  
*Scoparia ambigualis*. *New Forest*  
 — *basistrigalis*. *New Forest*, not common  
 — *cembrae*  
 — *dubitalis*. Abundant everywhere, especially on the chalk  
 — *dubitalis* var. *ingratella*. Abundant at *Sandown and Freshwater, Isle of Wight*  
 — *cratægella*  
 — *resinea*. *New Forest*  
 — *truncicolella*. *New Forest*, may be bred in quantity from moss on old roofs  
 — *angustea*. *New Forest*, not uncommon  
 — *pallida*. *New Forest* bogs  
*Crambus hortuellus*. Common  
*Chilo phragmitellus*  
*Schænobius forficellus*. Common in *N. F.* bogs  
*Anerastia lotella*. Sandhills, *Hayling*  
*Homœosama sinuella*. Abundant on coast near *Sandown, Isle of Wight*  
 — *nimbella*. *Shanklin, I. of W.*, and sandhills, *Hayling*, l. on flowers of ragworts and feverfew (*Senecio* and *Matricaria*)  
*Ephestia elutella*  
 — *ficulella*  
 — *ficella*  
 — *passulella*  
 — *semirufa*. Recorded from *Lyndhurst, Stainton's Manual*  
 — *kuhniella*  
 — *artemisiella*. Near *Blackgang, I. of W.*  
 — *oblitella*. Mr. Fletcher believes this species has not been taken elsewhere in U. K. than in *I. of W.* There is a record (*E. M. M.*, xv. 187) by J. B. Blackburn, and one taken in marshes *Yarmouth, I. W.*, was sold in Warren's collection, see Stevens' *Catalogue of Sale*, p. 12  
*Cryptoblabes bistrigella*. Mr. Fletcher has a specimen from Warren's collection labelled 'Stubington,' and he believes it also occurs in *New Forest*

### CRAMBITES

- Platytes cerussellus*. *I. of Wight and Hayling*, most abundant  
 — *alpinellus*. *Hayling*, on sandhills, comes to flowers of ragwort at dusk  
*Crambus falsellus*  
 — *pratellus*. Everywhere common  
 — *dumetellus*. Recorded for *Lyndhurst* in *Stainton's Manual*  
 — *sylvellus*. Locally abundant in *N. F.* bogs  
 — *hamellus*. May be taken freely on heaths near *Lyndhurst*  
 — *pascuellus*. Abundant, especially in damp places  
 — *uliginosellus*. Abundant in *N. F.* bogs  
 — *pinetellus*. *New Forest*  
 — *latistrius*. Abundant on sandhills, *Hayling*, and on heath near *Lyndhurst*  
 — *perlellus*  
 — „ var. *warringtonellus*. Occurs freely on heaths near *Lyndhurst* and in *Hayling Island*  
 — *tristellus*. Abundant everywhere, and very variable  
 — *inquinatellus*. Everywhere abundant  
 — *salinellus*. Occurs at *Hayling*  
 — *geniculellus* } Abundant everywhere  
 — *culmellus* }  
 — *chrysonuchellus*. Locally abundant in *Isle of Wight*  
*Plodia interpunctella*  
*Nephopteryx angustella*  
*Gymnancyla canella*. Sandy shore, *Hayling*  
*Phycis betulella*  
 — *carbonariella*. Heath near *Matley Bog, New Forest*  
 — *adornatella*. Swarms on chalk downs in *Isle of Wight*  
 — *splendidella* and *decuriella*  
 — *roborella*. *New Forest* and *Hayling*  
*Dioryctria decuriella*, Hb. *Ringwood*. Eustace Banks.  
*Pempelia palumbella*. Common on *New Forest* heaths  
 — *davisella* (*genistella*). *N. Forest, Hayling, Isle of Wight*. Larvæ may sometimes be taken in abundance  
*Rodophæa formosella*  
 — *consociella*. *New Forest*  
 — *sodalella*. *E. M. M.*, xix. 111, xxii. 26  
 — *advenella*. *New Forest*  
 — *marmorea*. Larvæ abundant on stunted blackthorns on coast of *Isle of Wight*  
 — *suavella*  
 — *tumidella*. *New Forest*, common  
*Onocera ahenella*. Abundant on *Freshwater Down, I. W.*, variable in size and colour  
*Melia sociella*. *New Forest*  
 — *anella*. On sandhills, *St. Helen's, I. W.*  
 — *cerella* } Often swarm in old  
*Meliphora alveariella* } beehives in *N. F.*

# A HISTORY OF HAMPSHIRE

## TORTRICES<sup>1</sup>

- Halias prasinana* } Both not uncommon in  
 — *quercana* } *New Forest*  
 — *chlorana*. *Yarmouth, Isle of Wight*,  
 among salallows  
*Sarrothripa revayana*. Very variable and not  
 uncommon among oak in the *N. F.*  
*Tortrix pyrastrana*. *New Forest*  
 — *piceana*. Has been taken in some num-  
 bers in the *New Forest* of late years by  
 Charles Gulliver and others  
 — *cratægana*. Near *Lyndhurst*  
 — *xylosteara* } *New Forest*, common  
 — *rosana* }  
 — *sorbiana*  
 — *cinnamomeana*. Abundant in a beech  
 wood, with undergrowth of whortle-  
 berry, near *Lyndhurst*  
 — *heparana* }  
 — *ribeana* } All abundant in *New Forest*  
 — *corylana* }  
 — *unifasciana* }  
 — *semialbana*. Meyrick, in summarising  
 its recorded distribution, in *H.-B. Brit.*  
*Lep.*, 532 (1895), includes 'Hants.'  
 We are not aware that it has been  
 taken in Hampshire of recent years  
 — *costana*. This species and the var. *latior-*  
*rana* occur in the *Yarmouth* salt marshes  
 — *viburnana*. Abundant in *New Forest* bogs,  
 the larvæ feeding on *Myrica* gale  
 — *viridana*. Everywhere abundant among  
 oak and hazel  
 — *ministrana* } Not uncommon in *New*  
 — *adjunctana* } *Forest*  
 — *branderiana*  
*Dichelia grotiana*. Not rare in *New Forest*,  
 also at *Basingstoke*  
*Ctenectra pilleriana*. Near *Ventnor*, also  
 in salt-marshes in the *Isle of Wight*,  
 and heath-bogs in the *New Forest*.  
 The specimens from the marshes are  
 larger and much redder than those  
 taken in the heath-bogs. Seems not  
 to have been taken elsewhere in Great  
 Britain than in *Devonshire*, *Dorsetshire*,  
 and *Hampshire*  
*Leptogramma literana*. Not uncommon in  
*New Forest* woods, a beautiful and  
 variable species  
*Peronea favillaceana*. Common among beech  
 in the *New Forest*, variable, but not so  
 much so as some of its congeners  
*Peronea rufana*. Sparingly in *New Forest*,  
 the larvæ feeding on *Salix repens*  
 — *mixtana*  
 — *comparana*  
 — *schalleriana* } All occur in *New*  
 — and var. *latifasciana* } *Forest*  
 — *variegana*  
 — *ferrugana*  
 — *cristana*. This beautiful and most vari-  
 able species is sometimes abundant in  
 the *N. F.* It is taken in September by  
 tapping and jarring hawthorn bushes.  
 — *hastiana*. Occurs in *Stubby* and *Wood*  
*Fidley* in the *New Forest*, but does not  
 seem abundant. Mr. Fletcher has taken  
 larvæ in some numbers in the *I. of W.*  
 — *umbrana*. *Whitley Wood* in the *N. F.*,  
 but seems to be rare  
 — *tristana*. Mr. Fletcher took a specimen of  
 the var. *logiana* (*Wood's Index*, fig. 1091)  
 between *Brockenhurst* and *Lyndhurst*  
 — *aspersana*. Common on the chalk in the  
*Isle of Wight*  
*Teras caudana*. *New Forest*, apparently not  
 so variable as in some other localities  
 — *contaminana*  
*Dictyoptyx læfingiana* } All common in  
 — *holmiana* } *New Forest*  
 — *bergmanniana*  
 — *forskaleana*  
*Argyrotoxa conwayana*. Everywhere com-  
 mon among ash and privet  
*Ptycholoma lecheana*. *New Forest*  
*Ditula semifasciana*. *New Forest*, not common  
*Penthina corticana*  
 — *soroculana* } All occur in *New Forest*  
 — *capræana* }  
 — *pruniana* }  
 — *cynosbana* }  
 — *ochroleucana* }  
 — *gentiana*. *Isle of Wight*  
 — *sellana* } *New Forest*  
 — *marginana* }  
*Spilonota ocellana* } *New Forest*  
 — *lariciana* }  
 — *aceriana*. Swarms in *Hayling Island*.  
 Common at *Lymington*. This species  
 is two-brooded. Mr. Fletcher has  
 found larvæ in spring as described by  
 Wilkinson (*Brit. Tort.*, p. 123), and also  
 in late summer as described by Barrett  
 (*E. M. M.*, x. 67)

<sup>1</sup> The list of Tortrices and Tineæ has been compiled by Mr. Percy M. Bright, but all the data and notes about them have been added by Messrs. E. R. Banks and W. H. B. Fletcher.—H. G.



## INSECTS

- Spilonota dealbana*. Very abundant in *N. F.*  
 — *suffusana*. *New Forest*  
 — *rosæcolana*  
 — *roborana*  
*Pardia tripunctana*. *New Forest*, abundant  
*Aspis udmanniana*. *New Forest*  
*Sideria achatana*. *New Forest*, but rare  
*Sericoris latifasciana*. *N. Forest*, not common  
 — *bifasciana*. *Bournemouth*, bred freely from blossoms of *Pinus pinaster*  
 — *littorana*. *Bournemouth* and *Isle of Wight*  
 — *cespitana*. *Hayling*, very abundant on the sandy commons  
 — *conchana*  
 — *lacunana*. Everywhere common  
 — *urticana*. *New Forest*  
 — *micana*  
*Mixodia schultzi*. *New Forest* heaths, but seems rare  
 — *ratzeburghiana*. Taken at *Basingstoke* by Mr. A. H. Hamm (see *Ent. Mo. Mag.*, ser. 2, vi. 195)  
 — *rufimitrana*. *New Forest*, extremely local. Bred by Mr. E. R. Banks  
 — *hawkerana*. *Hayling Island*, abundant among spurge on the sandhills, and has been proved by Mr. A. C. Vine to be two-brooded. Not recorded from any other British locality, except the *Isle of Portland, Dorset*  
*Roxana arcuana*. *New Forest*, common  
*Orthotænia antiquana*. *Freshwater, I. of W.*  
 — *ericetana*. *Isle of Wight*, appears scarce  
*Eriopsela fractifasciana* } Both occur in the *Isle*  
 — *quadrana* } of *Wight*  
*Cnephasia lepidana*. *N. F.*, not uncommon  
 — *musculana*. *New Forest*, abundant  
*Sciaphila nubilana*  
 — *conspersana*. The pale form, sometimes entirely without markings, is abundant at *Freshwater* and *Sandown, I. of W.* May be bred freely from larvæ feeding on spikes of *Plantago lanceolata*  
 — *subjectana*  
 — *pascuana*  
 — *virgaureana*  
 — *communana*  
 — *alternana*  
 — *sinuana*. *New Forest*, scarce. Taken by Mr. E. R. Banks in 1892  
 — *hybridana*  
*Sphaleroptera ictericana*  
*Capua favillaceana*. *New Forest*  
*Clepsis rusticana*. Not uncommon in *N. F.*  
*Bactra lanceolata*. The small form is everywhere abundant. The large form referred to in *Wilkinson's Tortrices*, p. 146, which Mr. Fletcher is inclined to consider a distinct species, is common on the shore of *Hayling Island*. The larvæ feed in shoots of *Scirpus maritimus*  
*Bactra furfurana*. Occurs in the salt marshes near *Yarmouth*  
*Phoxopteryx siculana*. Occurs in the *N. F.*  
 — *unguicana*. Swarms on heaths round *Lyndhurst*  
 — *uncana*. Near *Lyndhurst*, seems scarce  
 — *biarcuana*. *New Forest*, common  
 — *inornatana*. *New Forest*, not uncommon among *Salix repens*  
 — *comptana*. Swarms on the chalk in the *Isle of Wight*  
 — *lundana*. *N. Forest*, among wild vetches  
 — *diminutana*. *New Forest*, not common  
 — *mitterpacheriana*. Occurs in *New Forest*  
*Grapholitha lætana* } *New Forest*  
 — *paykulliana* }  
 — *nisana*  
 — *cinerana*  
 — *nigromaculana*. *New Forest* and *Isle of Wight* among *Senecio erucæfolius*, in the flower-heads of which the larvæ feed  
 — *campoliliana*. Common among willow in the *New Forest*  
 — *penkleriana*. Common among alder in the *New Forest*  
 — *obtusana*. Common in *New Forest*  
 — *nævana*. Common in the *New Forest* among hollies.  
 — *gemmiferana*. Coast of the *Isle of Wight* among *Lathyrus sylvestris*  
*Phlæodes tetraquetra*. Common in *N. F.*  
 — *immundana*  
*Hypermezia cruciana*. Abundant in *New Forest* and *Isle of Wight*  
*Batodes augustiorana*. Abundant in *New Forest* among yew  
*Pœdisca corticana* } Both abundant in *New*  
 — *profundana* } *Forest* on trunks of oaks  
 — *solandriana*. *New Forest*, not uncommon among birches, much less variable than in Scotland.  
 — *semifusca*  
 — *sordidana*  
*Ephippiphora cirsiiana*. Occurs in *Hayling* and *I. of W.* among *Centaurea scabiosa*  
 — *pflugiana*. *New Forest*, among thistles  
 — *brunnichiana*. *Freshwater* and *Sandown*, among *Tussilago farfara*  
 — *foeneana*  
 — *nigricostana*  
 — *trigeminana*. Abundant near *Freshwater*  
 — *tetragonana*. *New Forest*, not uncommon in Ramnor and Parkhill Enclosures, but very difficult to see and capture  
 — *ephippana*. Mr. Fletcher has a single specimen from *New Forest*  
*Olindia ulmana*. Mr. Fletcher has a single specimen taken in *Lyndhurst*

## A HISTORY OF HAMPSHIRE

- Semasia spiniana*. Near *Freshwater, I. of W.*  
 — *rufillana*. Common among *Daucus carota*.  
     Mr. Fletcher has bred it in Sussex from  
     *Silaus pratensis* and *Pastinaca sativa*  
 — *woeberana*
- Coccyx scopariana* } *Basingstoke*, taken by  
 — *ochsenheimeriana* } Mr. A. H. Hamm  
                                   (see *Ent. Mo. Mag.*,  
                                   ser. 2, vi. 195)
- *splendidulana* } Abundant in *New Forest*  
 — *argyrana* }  
 — *hyrciniana*. Abundant in *New Forest*  
     among spruces  
 — *nigricana*. *New Forest*, scarce. Taken  
     by Mr. E. R. Banks in 1891  
 — *distinctana*. The Rev. C. R. Digby took  
     a specimen near *Brockenhurst*  
 — *nanana*. *New Forest*  
 — *vacciniana*. *Mark Ash Wood, New Forest*,  
     among whortleberry  
*Heusimene fimbriana*. Occurs in oak woods  
     in *New Forest*  
*Retinia buoliana*. Abundant in plantations of  
     young Scotch firs in *New Forest*  
 — *pinicolana*. Less common by far than the  
     preceding in *New Forest*  
 — *turionana*. The Rev. C. R. Digby took  
     a specimen near *Brockenhurst*  
 — *pinivorana*. Among Scotch firs in *N. F.*  
     and round *Ringwood*  
 — *sylvestrana*. A well-known *Bournemouth*  
     species  
*Carpocapsa grossana*. *New Forest*, common  
     among beech  
 — *pomonana*  
*Endopisa pisana*. *Shanklin and Ventnor, I. W.*  
*Stigmonota coniferana*. *Ringwood*  
 — *perlepidana*. *New Forest* and *Fresh-*  
     *water*  
 — *internana*. Mr. W. C. Boyd met with a  
     specimen at *Bournemouth* in 1896  
 — *composana*. *New Forest* and *Isle of Wight*,  
     among clovers  
 — *weirana*. *New Forest*, seems scarce  
 — *nitidana*. *New Forest*  
*Dichrorampha politana*  
 — *alpinana*  
 — *petiverana* } *Hayling and Isle of Wight*,  
 — *plumbana* } everywhere common  
 — *plumbagana* } among yarrow  
 — *senectana*. This scarce and extremely  
     local species has been taken in the *Isle*  
     of *Wight*  
 — *consortana*. *Freshwater, Isle of Wight*  
*Pyrodes rhediana*  
*Catoptria albersana*. *New Forest*, among  
     honeysuckle  
 — *ulicetana*. Everywhere common among  
     gorse  
 — *nimbana*. *N. F.*, apparently very scarce
- Catoptria scopoliana*. *Freshwater, I. of Wight*,  
     not uncommon  
 — *scopoliana*, var. *parvulana*. Taken com-  
     monly at *Freshwater, Isle of Wight*, by  
     Mr. E. R. Banks, by sweeping flower-  
     heads of *Serratula tinctoria*, on the seeds  
     of which he has no doubt the larvæ there  
     feed. Mr. Fletcher has bred this variety  
     freely from heads of *Centaurea nigra*  
     gathered on the South Downs near  
     *Worthing*  
 — *fulvana*. *Isle of Wight*, among *Centaurea*  
     *scabiosa*  
 — *hohenwarthiana*  
 — *tripoliana*. Abundant in the *Yarmouth*  
     marshes among *Aster tripolium*; a  
     very variable species  
 — *pupillana*. *St. Catherine's Down*, among  
     *Artemisia absinthium*  
*Choreutes scintillulana*. *New Forest* bogs,  
     among *Scutellaria minor*.  
*Xylopora fabriciana*. Everywhere among  
     nettles  
*Lobesia reliquana*. Abundant in enclosures  
     in the *New Forest*  
 — *servillana*. Several have been bred by the  
     Rev. C. R. Digby and Mr. E. R.  
     Banks from swellings in twigs of *Salix*  
     *caprea* collected near *Brockenhurst* and  
     at *Wood Fidley* in the *New Forest*, and  
     Mr. Fletcher has taken the moth near  
     *Wood Fidley*  
*Eupœcilia atricapitana*. *Hayling Island*. Com-  
     mon among *Senecio jacobæa* on the  
     sandhills  
 — *maculosana*. *New Forest*  
 — *ambiguana*. *New Forest*. Not uncommon  
     among *Rhamnus frangula*  
 — *angustana*. *New Forest*. Abundant on  
     the heaths  
 — *hybridellana*. On the landslip near *Ventnor*  
 — *vectisana*. Common in the salt marshes  
     in the *Isle of Wight* among *Triglochin*  
     *maritimum*, on which the larvæ feed  
 — *affinitana*. *Hayling and Isle of Wight* in  
     the salt marshes  
 — *notulana*. *Matley Bog*, in the *New Forest*,  
     among mint  
 — *flaviciliana*. Recorded as occurring in the  
     *Isle of Wight* in Wilkinson's *British*  
     *Tortrices*, p. 308 (1859). *Basingstoke*,  
     taken by Mr. A. H. Hamm (see *Ent.*  
     *Mo. Mag.*, ser. 2, vi. 195)  
 — *roseana*. *Yarmouth*  
 — *ciliana*. Among cowslips, *Freshwater Down*  
 — *subroseana*  
*Xanthosetia zœgana* } Both common on chalk  
 — *hamana* } in the *Isle of Wight*  
*Chrosis tesserana*. Swarms on the chalk in  
     the *Isle of Wight*



## INSECTS

- Chrosis audouinana*. *New Forest*, scarce ; taken singly by the Rev. H. Williams and Mr. N. M. Richardson
- Argyrolepis baumanniana*. *Basingstoke*, taken by Mr. A. H. Hamm
- *subbaumanniana*. *Isle of Wight*
- *dubrisana*. Abundant on coast of *Isle of Wight*. Mr. Fletcher has a series of very large specimens bred from *Afton Down*
- *badiana*
- *cnicana*. *New Forest* bogs
- Cochylis francillonana*. Abundant in *Isle of Wight*
- *dilucidana*
- *smeathmanniana*. *Freshwater*, *Isle of Wight*, and *Hayling Island*
- *stramineana*. On the coast near *Sandown*
- *inopiana*. Abundant near *Freshwater*
- Aphelia pratana*
- Tortricodes hyemana*. Abundant in oak woods in the *New Forest*

### TINEÆ

- Lemnatophila phryganella*. Common in oak woods in the *New Forest*
- Dasytoma salicella*
- Exapate gelatella*
- Diurnea fagella*. Common and variable, *New Forest*, *Isle of Wight*
- Epigraphia steinkellneriana*. *New Forest*  
[*Talæporia pubicornis*. Mr. J. F. Stephens, in *Ill. Haust.*, iv. 233, records an example of this species, under the generic name *Cochleophasia*, from *Brockenhurst*, and some subsequent authors have copied his record. Mr. E. R. Banks, however, has discovered Stephens' specimen, bearing his MS. label '*pubicornis*,' and clearly the individual taken at *Brockenhurst*, and finds it is unquestionably *not* the rare *pubicornis*, but *Lemnatophila phryganella*. This is doubtless the specimen figured as *pubicornis* in Wood's *Index Entomologicus*, Pl. 41, fig. 1267. Stephens gives the date of capture as July, which, if correct, is surprising]
- Talæporia staintoni*, Wlsm. (= *conspurcatella*, *Auct. Angl.*, nec Zell.). The only known British locality is on the shore of *Southampton Water*. It was taken there by Mr. A. H. Swinton in 1867, and taken and bred by Mr. E. R. Banks in 1892 and subsequently
- *pseudobombycella*. Everywhere common on tree trunks, palings, etc.
- Psyche villosella*. Locally abundant in the *New Forest* district
- *opacella*. *New Forest* and *Bournemouth*
- Fumea reticella*. *Hayling Island*, in the salt marshes
- Fumea sepium* (betulina). (See *E.M.M.*, xxxvi. p. 2.) Seems not uncommon in *N. F.*
- *intermediella*. *N. F.*, *Hayling*, *I. of W.*
- *roborella*. *New Forest*
- Solenobia inconspicua*. Not scarce in the *New Forest*
- Xysmatodoma melanella*. *New Forest* and *Ringwood*
- *argentimaculella*. *Hayling Island*
- Ochsenheimeria birdella*. *Hayling Island*
- *bisontella*. *New Forest*, locally common
- Scardia boleti*. *New Forest*, scarce
- *corticella*. *New Forest*, a specimen was taken by Mr. E. R. Banks in 1882
- *parasitella*. *New Forest*, not uncommon
- *cloacella*. *New Forest*, generally common
- *granella*
- *arcella*. *New Forest*
- Tinea ferruginella*. *Brockenhurst*
- *rusticella*. *New Forest*, may be bred freely out of old birds' nests
- *fulvimitrella*. *N. F.*, widely distributed
- *tapetzella*. *Beaulieu*
- *albipunctella*
- *pellionella*
- *flavescentella*
- *lappella*. *New Forest*, may be bred freely from old birds' nests
- *merdella*
- *semifulvella*. *New Forest*
- *ochraceella*. *Stainton*, in *Nat. Hist. Tin.*, xiii. 50 (1873), says, 'I believe it has also occurred in the *New Forest*,' and Meyrick, in *H.-B. Brit. Lep.*, 782 (1895), gives '*Hants*' as a locality for it, perhaps on the strength of *Stainton's* remark. Whether it has really occurred in *Hampshire*, as well as in *Perthshire*, we do not know
- *bistrigella*. *New Forest*, among birch
- Lampronia quadripunctella*. On the common at *Hayling*
- *luzella*. *New Forest*
- *prælatella*. *New Forest*, common
- Incurvaria muscella*. *New Forest*, *Isle of Wight*
- *pectinea*. *New Forest*, among birch
- *oehlmanniella*
- *capitella*. *New Forest* (Jones' Enclosure)
- Micropteryx calthella*. *New Forest*, *Pamber Forest*, etc.
- *aruncella*. *Basingstoke*
- *seppella*. *New Forest* and elsewhere
- *mansuetella*
- *allionella*. *Pamber Forest*
- *thunbergella*
- *purpurella*
- *semipurpurella*
- *unimaculella*
- *subpurpurella*

All occur abundantly in the *New Forest*

# A HISTORY OF HAMPSHIRE

- Micropteryx sparmannella*  
*Nemophora swammerdamella* } *New Forest, Isle of Wight*  
 — *schwarziella* }  
 — *metaxella*. In *New Forest* bogs  
*Adela fibulella*  
 — *rufimitrella*  
 — *sulzella*. *Carisbrooke*  
 — *degeerella* } *New Forest*  
 — *viridella* }  
*Nematois cupriacellus*  
 — *minimellus*. *Freshwater*, not uncommon locally  
*Swammerdamia apicella* }  
 — *spiniella* } *New Forest*  
 — *oxyacanthella* }  
 — *griseocapitella* }  
 — *lutarella* }  
*Scythropia cratægella*. *New Forest, Basingstoke*  
*Hyponomeuta vigintipunctatus*. *New Forest*, in gardens among *Sedum telephium*  
 — *padellus*  
 — *cagnagellus*  
 — *euonymellus*  
*Anesychia funerella*  
*Prays curtisellus* }  
 — *curtisellus*, var. *rusticus* } *New Forest*  
*Plutella cruciferarum*. Everywhere common  
 — *porrectella*  
 — *annulatella*  
*Cerostoma vittella*  
 — *radiatella*. *New Forest*, very abundant and variable  
 — *costella* }  
 — *sylvella* }  
 — *alpella* }  
 — *horridella* } All occur in the *New Forest*  
*Harpiteryx scabrella* }  
 — *nemorella* }  
 — *xylostella* }  
*Theristis caudella*. *New Forest*, scarce  
*Orthotelia sparganella*. Abundant in *Matley Bog, New Forest*  
*Enicostoma lobella*  
*Phibalocera quercana*. Everywhere abundant  
*Depressaria costosa*. Abundant among gorse  
 — *liturella*. Abundant among *Centaurea scabiosa*  
 — *bipunctosa*. *Freshwater Down*, seems scarce  
 — *pallorella*. *New Forest*  
 — *umbellella*. *New Forest*, abundant among gorse  
 — *assimilella*  
 — *nanatella*. *Bembridge Down, Isle of Wight*  
 — *atomella*. *Hayling Island* among *Genista tinctoria*  
 — *scopariella*. *Hayling Island*, among *Sarothamnus scoparius*  
 — *arenella*. *New Forest, Isle of Wight*  
 — *propinquella*  
 — *subpropinquella*  
*Depressaria alstroëmeriella*  
 — *purpurea*  
 — *hypericella*  
 — *cnicella*. *Hayling Island*  
 — *angelicella*. In the *New Forest* woods and bogs  
 — *carduella*  
 — *ocellella*. *Isle of Wight*  
 — *yeatiella*. *New Forest*  
 — *applanella*. Everywhere common  
 — *ciliella*. *New Forest*  
 — *rotundella*. *Freshwater* and *St. Catherine's Downs*  
 — *pimpinella*  
 — *albipunctella*  
 — *olerella*. *Woolmer Forest*, taken by C. G. Barrett (*E. M. M.*, i. 171)  
 — *pulcherrimella*. *Sandown*  
 — *douglasella*. *Freshwater*  
 — *chærophyllella*  
 — *ultimella*  
 — *nervosa*. Near *Yarmouth*, abundant  
 — *badiella*. Very abundant on *Freshwater Down*  
 — *pastinacella*  
 — *heracleana*. Common in *Isle of Wight*  
*Psoricoptera gibbosella* } *New Forest*  
*Gelechia cinerella* }  
 — *rufescens*  
 — *gerronella*. Near *Lyndhurst*  
 — *malvella*. *Yarmouth*, locally common  
 — *populella*  
 — *lentiginosella*  
 — *velocella*. On the common, *Hayling Island*  
 — *fumatella*. On the sandhills, *Hayling Island*  
 — *ericetella*. Abundant everywhere on heaths  
 — *mulinella*. Abundant everywhere among gorse  
 — *sororculella*  
 — *alacella*. *New Forest*, two specimens were taken near *Brockenhurst* by Mr. E. R. Banks in 1890, and one by the Rev. C. R. Digby in 1896  
 — *diffinis*. *Hayling Island, New Forest*  
 — *terrella*. Everywhere common  
 — *desertella* } Abundant on sandhills, *Hay-*  
 — *senectella* } *ling* and *St. Helen's, I. of W.*  
 — *similella*  
 — *umbrosella*. *Hayling*, abundant on coast sandhills  
 — *umbrosella*, var. *portlandicella*. *Hayling*  
 — *mundella*. Abundant on coast sandhills  
 — *affinis*  
 — *basaltinella*  
 — *domestica*  
 — *rhombella*  
 — *proximella*. *New Forest*  
 — *notatella*  
 — *lyellella*. *New Forest*, scarce



# INSECTS

- Gelechia vulgella*  
 — *luculella*. *New Forest*  
 — *distinctella*. The ordinary form is abundant on the *Hayling* sandhills; a dark form occurs on the heaths near *Lyndhurst*  
 — *costella*. *Freshwater, Isle of Wight*  
 — *maculea*  
 — *blandulella*. Sandhills, *Hayling*  
 — *tricolorella*  
 — *semidecandrella*. Sandhills, *Hayling*  
 — *knaggsiella*  
 — *marmorea*. Abundant on coast sandhills  
 — *obsoletella*. *St. Helens* and *Sandown, Isle of Wight*  
 — *littorella*. Near *Ventnor*, originally found by Mr. S. Stevens (*Trans. Ent. Soc. n.s. i. 67*). Recently rediscovered there by Lord Walsingham  
 — *instabilella*. Abundant in salt marshes among *Atriplex portulacoides*  
 — *salicorniæ*. *Isle of Wight*  
 — *plantaginella*. Common near *Ventnor* and *Freshwater* among *Plantago coronopus*, and near *Yarmouth* among *P. maritima*  
 — *atriplicella*. *Hayling Island*  
 — *sequax*. *Freshwater*  
 — *alella*. Not uncommon on mossy beech trunks in the *New Forest*  
 — *leucatella*  
 — *albicapitella*  
 — *mouffetella* } *New Forest*  
 — *dodecella*. *New Forest*, in the fir woods  
 — *triparella*  
 — *tenebrella* } *New Forest*  
 — *ligulella*. Near *Luccombe Chine*, a very local species  
 — *tæniolella*. *Isle of Wight*, abundant on chalk downs  
 — *anthyllidella*. *Isle of Wight*  
 — *bifractella*. Coast near *Ventnor*  
 — *lucidella*  
 — *oblitella*. Mr. Fletcher has had specimens sent him from the *New Forest* of a form paler and smaller than the fen form. He and Mr. Bankes take similar specimens in Sussex and Dorset respectively  
 — *gemmella*. *New Forest*  
 — *stipella*. Mr. Fletcher took the typical form of this species near *Havant* in July, 1898, and bred it in 1899 from larvæ mining leaves of *Atriplex portulacoides*. He believes it has not hitherto been recorded as British  
 — *stipella*, var. *næviferella*. *Hayling*, and *Yarmouth, Isle of Wight*  
 — *pictella*. Very abundant on the coast near *St. Helens*  
 — *brizella*. Abundant in *Hayling* among *Statice limonium*  
 — *ericinella*. Common on *N. F.* heaths
- Gelechia inopella*. Abundant in *Isle of Wight* among *Inula dysenterica*  
 — *subocellella*. *New Forest* among *Mentha*  
*Parasia lappella*  
 — *carlinella*. *Isle of Wight*, on the chalk  
*Cleodora cytisella* } *New Forest*  
*Chelaria hübnerella* }  
*Anarsia spartiella*. *New Forest*, abundant among gorse  
*Hypsolophus fasciellus*. Jones's Enclosure, *New Forest*, seems rare.  
*Aplota palpella*. *New Forest*, one specimen was taken near *Lyndhurst* by Mr. E. R. Bankes in 1882, and another by the Rev. C. R. Digby in 1884  
*Pleurota bicostella*. *New Forest*, common on heaths  
*Harpella geoffroyella*  
*Dasycera sulphurella*. Very abundant among rotten wood  
 — *olivierella*  
*Cecophora minutella*  
 — *flavimaculella*. *New Forest*, common among *Angelica sylvestris*  
 — *lambdella*. *Hayling*, among brambles; *New Forest*, among old gorse bushes  
 — *tinctella*  
 — *panzerella*  
 — *flavifrontella*  
 — *unitella* } All occur not uncommonly in the old woods in the *New Forest*  
 — *fuscescens*  
 — *pseudospretella*. Everywhere common, especially in outbuildings  
 — *kindermanniella*  
*Endrosis fenestrella*. Very abundant everywhere  
*Butalis grandipennis*. Common among dwarf gorse in the *New Forest*  
 — *variella*. *Hayling Island, New Forest*  
 — *incongruella*. *New Forest* heaths  
*Pancalia latreillella*. Sandhills, *Hayling Island*  
 — *leuwenhoekella*  
*Glyphipteryx fuscoviridella*. *New Forest, Shanklin*  
 — *thrasonella*. Generally abundant in rushy places  
 — *haworthella*. Bogs, near *Lyndhurst*  
 — *oculatella*. *Yarmouth* salt marshes  
 — *schœnicolella*. Mr. Fletcher has a specimen which he took in the *Yarmouth Marshes*. The capture is noteworthy, as the only known food-plant of the species, *Schœnus nigricans*, does not seem to have been recorded from the island. Townsend (*Flora of Hampshire*, 1883, p. 373) says of it, 'absent in *I. of W.*'  
 — *fischeriella*  
*Perittia obscurepunctella*. *New Forest*, and *Freshwater, Isle of Wight*

## A HISTORY OF HAMPSHIRE

- Tinagma sericiellum.* *New Forest* oak-woods
- Argyresthia nitidella* }  
 — *semitestacella* }  
 — *albistria* } All occur in the *New Forest*  
 — *semifusca* }  
 — *glaucinella* }  
 — *retinella* }  
 — *abdominalis* }  
 — *andereggiella* }  
 — *gœdartella* } All occur in the *New Forest*  
 — *brockeella* }  
 — *pygmæella* }
- Cedestis farinatella* }  
*Ocnerostoma piniariella* } *New Forest*  
*Gracillaria swederella* }
- *stigmatella.* *New Forest* and *Isle of Wight*  
 — *falconipennella.* *New Forest.* A few have been bred by Mr. Fletcher and the Rev. C. R. Digby  
 — *semifascia.* *Isle of Wight* and *New Forest*  
 — *elongella* and its var. *Stramineella.* Both occur in the *New Forest*  
 — *tringipennella.* Everywhere common among *Plantago lanceolata*  
 — *syringella.* Everywhere common among privet, lilac, and ash  
 — *omissella.* *Freshwater*  
 — *phasianipennella*  
 — *auroguttella.* *New Forest*  
 — *imperialella.* *Brockenhurst, W. Warren,* in litt.  
 — *ononidis.* *Freshwater*  
*Coriscium brongiardellum*  
 — *citrinellum.* Abundant and variable in *New Forest*  
*Ornix avellanella* }  
 — *torquilella* } *New Forest*  
*Goniodoma limoniella.* *Yarmouth* salt marshes  
*Coleophora deauratella.* Near *Ventnor*  
 — *alcyonipennella.* *New Forest*  
 — *paripennella.* *New Forest,* larvæ on black-thorn and alder  
 — *ahenella.* *New Forest,* especially in the enclosures  
 — *potentillæ.* Near *Lyndhurst,* very local  
 — *melilotella* (*frischella*). Near *Bembridge* and *Ventnor*  
 — *wockeella.* *Isle of Wight,* on chalk downs  
 — *binotapennella.* *Yarmouth* salt marshes, common among *Salicornia herbacea*  
 — *vibicella.* *Hayling Island*  
 — *pyrrhulipennella* }  
 — *albicosta* } *New Forest*  
 — *anatipennella*  
 — *palliatella.* *Ramnor* enclosure, *N. Forest,* and *Hayling Island*  
 — *ibipennella*  
 — *currucipennella.* *Hampstead, I. of Wight*  
 — *discordella.* Abundant in *I. of Wight*
- Coleophora genistæ.* Among *Genista anglica,* *Forest*  
 — *conyzæ.* *Sandown*  
 — *therinella.* Near *Ventnor*  
 — *troglydytella.* Near *Ventnor*  
 — *murinipennella.* Everywhere abundant among *Luzula pilosa.*  
 — *alticolella.* *Hayling, Isle of Wight,* and *New Forest,* among *Juncus articulatus* and its sub-species  
 — *glaucicolella.* Near *Ventnor,* abundant  
 — *obtusella.* *Yarmouth* marshes, among *Juncus maritimus*  
 — *cæspititiella.* Everywhere among *Juncus glomeratus*  
 — *adjunctella.* *Yarmouth* salt marshes, not uncommon among *Juncus gerardi*  
 — *tengstromella.* *Yarmouth*  
 — *mæniacella.* *Hayling,* among *Atriplex portulacoides*  
 — *apicella.* *Hayling,* common by roadsides among *Stellaria graminea*  
 — *juncicolella.* *New Forest* heaths  
 — *laricella.* *New Forest* enclosures  
 — *nigricella.* *Freshwater,* larvæ locally common on hawthorn  
 — *fuscedinella.* *New Forest,* on birches; *Freshwater,* larvæ common on elm  
 — *gryphipennella.* *New Forest,* larvæ common on wild rose  
 — *siccifolia.* *New Forest,* the larvæ have been met with by the Rev. C. R. Digby on crab-apple in *Whitley Wood*  
 — *viminetella.* *New Forest* bogs, on *Myrica gale*  
 — *lutipennella.* *New Forest,* common  
 — *limosipennella.* *New Forest,* local  
*Strathmopoda pedella.* *New Forest,* among alders in the bogs  
*Cosmopteryx druryella*  
 — *orichalcea.* *Denny Wood, New Forest*  
*Batrachedra pinicolella.* *New Forest* among firs  
*Chauliodus daucellus.* Near *Sandown,* and *Freshwater*  
 — *insecurellus.* Near *Sandown,* among *Thesium humifusum*  
 — *illigerellus.* *New Forest*  
 — *chærophyllellus.* Near *Ventnor,* abundant  
*Laverna lacteella.* *New Forest* (*Jones' Enclosure*)  
 — *miscella.* *Freshwater Down,* abundant  
 — *stephensiella.* *New Forest*  
 — *epilobiella.* *Isle of Wight*  
 — *phragmitella.* Among *Typha* in the *N. F.*  
 — *decorella*  
 — *subbistrigella*  
 — *rhamniella.* *New Forest*  
*Chrysoclysta schrankella.* *New Forest*  
 — *flavicapitella*



## INSECTS

*Asychna modestella*. *Beechen Lane* and elsewhere in the *New Forest*  
 — *terminella*. *Mark Ash Wood, N. Forest*  
*Chrysocoris festaliella*. *New Forest*  
*Antispila pfeifferella*  
*Elachista gleichenella*. *New Forest*, common  
 — *albifrontella*. *New Forest*  
 — *atricomella*  
 — *luticomella*. *New Forest*  
 — *obscura*. *Freshwater*  
 — *bedellella*. Abundant on chalk, *I. of W.*  
 — *megerlella*. *Freshwater*  
 — *rhyncosporella*. *New Forest* bogs  
 — *subochreella*. *Denny Wood* and elsewhere in the *New Forest*  
 — *scirpi*. *Yarmouth* salt marshes  
 — *biatomella*. *Hayling Island*, larva feeding on *Carex arenaria*; *Freshwater* and *Bembridge Downs*  
 — *cygnipennella*  
*Tischeria complanella* } All occur in the  
 — *marginæa* } *New Forest*  
 — *angusticolella* }  
*Lithocolletis quinqueguttella*. *New Forest*  
 — *blancardella* } *New Forest, Botley, Isle of*  
 — *concomitella* } *Wight*  
 — *oxyacanthæ*. *New Forest*  
 — *corylella*  
 — *spinicolella* } *New Forest*  
 — *faginella* }  
 — *salicicolella* }  
 — *ulmifoliella* }  
 — *spinolella* } *New Forest*  
 — *quercifoliella* }  
 — *corylifoliella* }  
 — *ulicicolella*. *New Forest, Hayling*  
 — *alnifoliella* }  
 — *heegeriella* } *New Forest*  
 — *cramerella* }  
 — *emberizæpennella* }  
 — *trifasciella* }  
*Lyonetia clerckella*. *New Forest* and *I. of W.*  
*Phyllocnistis saligna*  
 — *suffusella* } *Hayling Island*  
*Cemiostoma spartifoliella* }  
 — *scitella*. *New Forest*  
 — *wailesella*. *Hayling Island*  
 — *lotella*. *New Forest*, locally common  
 — *lathyrifoliella*. *Isle of Wight*  
*Opostega salaciella*. *Brockenhurst*, locally common  
*Bucculatrix cidariella* } *New Forest*  
 — *ulmella* }  
 — *cratægi* }  
 — *maritimella*. *Yarmouth* salt marshes  
 — *frangulella*. *New Forest*  
 — *cristatella*. Near *Sandown* and *Freshwater*  
*Nepticula ruficapitella*  
 — *anomalælla*  
 — *fletcheri*. *New Forest*

*Nepticula oxyacanthella*  
 — *minusculella*  
 — *septembrella* } *New Forest*  
 — *subbimaculella* }  
 — *argyropeza* }  
 — *salicis*  
 — *betulicola*  
 — *ignobilella*. *Isle of Wight*, taken by Mr. W. Wing (see *Nat. Hist. Tin.*, i. 250-2)  
 — *acetosæ*. *Isle of Wight*, found by Mr. W. Wing between *Niton* and *Blackgang* (see *Nat. Hist. Tin.*, i. 232). *New Forest*, larvæ not uncommon at *Wood Fidley*  
*Nepticula tityrella*  
 — *marginicolella*  
 — *alnetella*  
 — *centifoliella*  
 — *aurella*  
*Bohemannia qudrimaculella*. *New Forest*

### PTEROPHORI

*Agdistes bennettii*. Abundant in salt marshes in *Hayling* and *Isle of Wight*  
*Pterophorus trigonodactylus*. *Isle of Wight* coast, common  
 — *acanthodactylus*. Common on *New Forest* heaths  
 — *parvidactylus* } Abundant on *I. of Wight*  
 — *phæodactylus* } coast  
 — *teucarii*. Not uncommon among *Teucrium scorodonia* on sandy common, *Hayling*  
 — *plagiodactylus*. *New Forest* and *Isle of Wight*, abundant  
 — *loewii*. Often very abundant on sandy common at *Hayling*; larvæ feed on seed vessels of *Erythræa centaurium*. There is probably a limited summer brood mining in, when young, and feeding externally on, when older, the leaves of the food plant. Mr. Fletcher has reared specimens of autumn brood from larvæ feeding thus  
 — *fuscodactylus*. *Isle of Wight*  
 — *microdactylus*. *Isle of Wight* coast  
 — *paludum*. *Woolmer Forest*. (C. G. Barrett, *E. M. M.*, ii. 263)  
 — *spilodactylus*. Abundant locally on the chalk downs of the *Isle of Wight*. Occurs also in the counties of *Dorsetshire*, *Kent*, and *Sussex*  
 — *pterodactylus* (*monodactylus*). Everywhere common  
 — *pentadactylus*. Everywhere common  
*Alucita polydactyla*. *New Forest*; larvæ may sometimes be taken in abundance in flowers of honeysuckle

# A HISTORY OF HAMPSHIRE

## DIPTERA

(*Flies*)

The number of British Entomologists who turn their attention to Diptera being very few, the greater part of the County of Hampshire has probably never been worked at all, and the following list must therefore be far from a complete one, although sufficient to show that the fauna is rich in Diptera or two-winged flies. With exception of the Tachinidæ and Cæstridæ, which are now included in the Muscidæ, I have followed Mr. Verrall's British List, and in cases where I have not taken a species myself I give the name of the person who has done so.

## MYCETOPHILIDÆ

Sciara Thomæ, L.  
— præcox, Mg.  
Mycetophila punctata, Mg.  
— bimaculata, F.  
— signata, Mg.  
— lunata, Mg.  
Rymosia fasciata, Mg.  
Leptomorphus Walkeri, Curt.  
Sciophila marginata, Mg.  
— incisurata, Ztt.  
Platyura marginata, Mg.  
— concisa, Wlk.  
Ceroplatys sesioides, Whlb.  
Macrocera fasciata, Mg.  
— lutea, Mg.  
— centralis, Mg.

## BIBIONIDÆ

Scatopse notata, L.  
 Dilophus febrilis, L.  
 — albipennis, Mg.  
 Bibio pomonæ, F.  
 — Marci, L.  
 — leucopterus, Mg.  
 — hortulanus, L.  
 — venosus, Mg.  
 — varipes, Mg.  
 — laniger, Mg.  
 — Johannis, L.  
 — lacteipennis, Ztt.

## SIMULIDÆ

*Simulium reptans*, L.

CHIRONOMIDÆ

Chironomus plumosus, L.  
— annularis, Deg.  
— virescens, Mg.  
— tentans, F.  
Orthocladius stercorarius, Deg.  
Tanytus varius, F.  
— nebulosus, Mg.

CULICIDÆ

Culex pipiens, L.  
— nemorosus, Mg.  
— annulatus, Schrk.

## PTYCHOPTERIDÆ

*Ptychoptera albimana*, F.  
— *scutellaris*, Mg.

## LIMNOBIDÆ

*Limnobia bifasciata*, Schrk.  
— annulus, Mg.  
— quadrinotata, Mg.  
— nubeculosa, Mg.  
— tripunctata, F. Mr. G. H. Verrall  
*Dicranomyia modesta*, Mg.      ”  
*Rhamphidia longirostris*, Mg.     ”  
*Thaumastoptera calceata*, Mik.   ”  
*Goniomyia tenella*, Mg.            ”  
*Erioptera tæniorota*, Mg.  
— fuscipennis, Mg.  
*Ephelia marmorata*, Mg. }  
      *decora*, Hal. }  
*Pœcilostola punctata*, Schrk.  
*Epiphragma picta*, F.  
*Limnophila Meigenii*, Ver.  
— lineola, Mg.  
— ferruginea, Mg. Mr. G. H. Verrall  
— lucorum, Mg.          ”  
— nemoralis, Mg.         ”  
*Trichocera hiemalis*, Deg.

## TIPULIDÆ

Dolichopeza sylvicola, Curt.  
Pachyrrhina crocata, L.  
— imperialis, Mg.  
— scurra, Mg.  
— histrio, F.  
— cornicina, L.  
Tipula confusa, V. de.Wlp.  
— marmorata, Mg.  
— rufina, Mg.  
— pabulina, Mg.



# INSECTS

*Tipula varipennis*, Mg.

— *flavolineata*, Mg.

— *lunata*, L.

— *lateralis*, Mg.

— *vernalis*, Mg.

— *vittata*, Mg.

— *gigantea*, Schrk.

— *lutescens*, F.

— *oleracea*, L.

— *fascipennis*, Mg.

— *ochracea*, Mg.

— *Diana*, Mg.

*Xiphura nigricornis*, Mg.

*Ctenophora ornata*, Mg. J. C. Dale, 1821,  
(Curt. Ent.)

— *flaveolata*, F. Miss Chawner

— *pectinicornis*, L.

## RHYPHIDÆ

*Rhyphus fenestralis*, Scop.

— *punctatus*, F.

## STRATIOMYIDÆ

*Stratiomys chamæleon*, L. Col. Yerbury

— *potamida*, Mg.

— *longicornis*, Scop. Mr. B. G. Rye

*Odontomyia argentata*, F. Col. Yerbury

*Chrysonotus bipunctatus*, Scop.

*Sargus flavipes*, Mg.

— *cuprarius*, L.

— *infuscatus*, Mg.

*Chloromyia formosa*, Scop.

*Microchrysa polita*, L.

*Beris clavipes*, L.

— *vallata*, Forst.

— *chalybeata*, Forst.

*Actina tibialis*, Mg.

## XYLOPHAGIDÆ

*Xylomyia maculata*, F. Rev. H. S. Gorham

*Xylophagus ater*, F.

## TABANIDÆ

*Hæmatopota pluvialis*, L.

— *crassicornis*, Whlb.

*Theriopectes micans*, Mg.

— *tropicus*, Mg.

var. *melanochroiticus*, Bauer

var. *bisignatus*, Jaen.

— *solstitialis*, Mg. (?)

*Atylotus fulvus*, Mg.

*Tabanus bovinus*, L.

— *bromius*, L.

— *autumnalis*, L.

— *maculicornis*, Ztt.

*Chrysops cæcutiens*, L.

— *quadratus*, Mg.

— *relictus*, Mg. Col. Yerbury and

Mr. W. R. O. Grant

## LEPTIDÆ

*Leptis scolopacea*, L.

— *tringaria*, L.

— *lineola*, F.

*Chrysopilus aureus*, Mg.

— ♂ *atratus*, F. }

♀ *auratus*, F. }

*Atherix marginata*, F. Col. Yerbury

## ASILIDÆ

*Leptogaster cylindrica*, Deg.

*Dioctria œlandica*, L.

— *Reinhardi*, W.

— *atricapilla*, Mg.

— *rufipes*, Deg.

— *Baumhaueri*, Mg.

— *flavipes*, Mg.

— *linearis*, F.

*Laphria marginata*, L.

*Asilus crabroniformis*, L.

*Epitriptus cingulatus*, F.

*Neoitamus cyanurus*, Lw.

*Machimus atricapillus*, Fln.

*Dysmachus trigonus*, Mg.

## BOMBYLIDÆ

*Anthrax flava*, Mg.

— *fenestrata*, Fln.

*Bombylius major*, L.

— *minor*, L. Mr. H. Rogers

## THEREVIDÆ

*Thereva nobilitata*, F.

— *plebeia*, L.

— *funebis*, Mg.

— *annulata*, F.

## SCENOPINIDÆ

*Scenopinus fenestralis*, L.

## CYRTIDÆ

*Oncodes gibbosus*, L. Miss Chawner,

Mr. J. I. King

*Paracrocera globulus*, Pz. Col. Yerbury,

Mr. C. O. Waterhouse

## EMPIDÆ

*Hybos grossipes*, L.

— *femoratus*, Müll.

*Cyrtoma spuria*, Fln.

*Rhamphomyia nigripes*, F.

— *sulcata*, Fln.

— *cinerascens*, Mg.

— *albosegmentata*, Ztt. Mr. G. H. Verrall

— *variabilis*, Fln.

— *umbripennis*, Mg. Mr. G. H. Verrall

## A HISTORY OF HAMPSHIRE

*Empis tessellata*, F.  
 — *livida*, L.  
 — *stercorea*, L.  
 — *trigramma*, Mg.  
 — *lutea*, Mg.  
 — *vitripennis*, Mg. Mr. G. H. Verrall  
 — *volucris*, Mg. „  
 — *grisea*, Fln. „  
*Pachymeria femorata*, F.  
*Hilara cilipes*, Mg.  
 — *maura*, F.  
 — *squalens*, Ztt. Mr. G. H. Verrall  
 — *thoracica*, Mcq.  
 — *flavipes*, Mg.  
*Ædalia stigmatella*, Ztt.  
*Hemerodromia precatória*, Fln.

### DOLICHOPODIDÆ

*Psilopus platypterus*, F.  
 — *Wiedemanni*, Fln. Mr. G. H. Verrall  
*Neurigona pallida*, Fln.  
*Eutarsus aulicus*, Mg. Mr. G. H. Verrall  
*Dolichopus plumipes*, Scop. „  
 — *pennatus*, Mg. „  
 — *popularis*, W. „  
 — *medicornis*, Ver. „  
 — *æneus*, Deg.  
*Tachytrechus consobrinus*, Wlk. „  
*Pœcilobothrus nobilitatus*, L.  
*Chrysotus neglectus*, W.  
 — *cilipes*, Mg. Mr. G. H. Verrall  
*Argyra diaphana*, F.  
 — *argyria*, Mg.  
*Xiphandrium caliginosum*, Mg.  
*Hydrophorus præcox*, Lehm. Mr. G. H. Verrall  
*Anepsius flaviventris*, Mg. „  
*Thinophilus ruficornis*, Hal. „

### LONCHOPTERIDÆ

*Lonchoptera punctum*, Mg.  
 — *flavicauda*, Mg.  
 — *lacustris*, Mg.  
 — *tristis*, Mg.

### PIPUNCULIDÆ

*Chalarus spurius*, Fln. Col. Yerbury  
*Pipunculus campestris*, Ltr. J. Curtis (Curt.  
 — *pratorum*, Fln. Ent.)  
 — *flavipes*, Mg.  
 — *sylvaticus*, Mg.  
*Cephalops auctus*, Fln.  
 — *pilosus*, Ztt.  
*Nephrocercus flavicornis*, Lw.

### SYRPHIDÆ

*Paragus tibialis*, Fln.  
*Pipiza noctiluca*, L.

*Pipiza lugubris*, F.  
 — *vitripennis*, Mg.  
 — *festiva*, Mg.  
*Orthoneura elegans*, Mg.  
 — *nobilis*, Fln.  
*Psilota atra*, Fln. } Col. Yerbury  
     = *anthracina*, Mg. }  
*Chrysogaster metallina*, F.  
 — *splendens*, Mg.  
 — *chalybeata*, Mg.  
 — *cœmeteriorum*, L.  
 — *bicolor*, Meq.  
*Chilosia sparsa*, Lw.  
 — *pubera*, Ztt.  
 — *scutellata*, Fln.  
 — *pulchripes*, Lw.  
 — *vernalis*, Fln.  
 — *chloris*, Mg. (?)  
 — *grossa*, Fln. Col. Yerbury  
 — *flavicornis*, F.  
 — *flavimana*, Mg.  
 — *albitarsis*, Mg.  
 — *variabilis*, Pz.  
*Leucozona lucorum*, L.  
*Melanostoma quadrimaculatum*, Ver.  
 — *scalare*, F.  
 — *mellinum*, L.  
 — *hyalinatum*, Fln.  
*Pyrophæna ocymi*, F.  
 — *rosarum*, F.  
*Platychirus manicatus*, Mg.  
 — *albimanus*, F.  
 — *discimanus*, Lw. Col. Yerbury  
 — *peltatus*, Mg.  
 — *scutatus*, Mg.  
 — *fulviventris*, Mcq. Col. Yerbury  
 — *clypeatus*, Mg.  
 — *angustatus*, Ztt.  
*Didea fasciata*, Mcq.  
 — *intermedia*, Lw. Col. Yerbury  
*Syrphus lasiophthalmus*, Ztt.  
 — *punctulatus*, Ver.  
 — *umbellatarum*, F.  
 — *auricollis*, Mg.  
 — *cinctellus*, Ztt.  
 — *balteatus*, Deg.  
 — *bifasciatus*, F.  
 — *luniger*, Mg.  
 — *corollæ*, F.  
 — *annulatus*, Ztt.  
 — *nitidicollis*, Mg.  
     var. *vitripennis*, Mg.  
 — *ribesii*, L.  
 — *grossulariæ*, Mg.  
 — *tricinctus*, Fln.  
 — *venustus*, Mg.  
 — *albostratus*, Fln.  
 — *guttatus*, Fln.  
*Catabomba pyrastri*, L.  
     var. *unicolor*, Curt.



## INSECTS

*Pelecocera tricineta*, Mg. Col. Yerbury.  
*Sphærophoria dispar*, Lw.  
 — *picta*, Mg.  
*Xanthogramma citrofasciatum*, Deg.  
 — *ornatum*, Mg.  
*Myiolepta luteola*, Gmel.  
*Baccha elongata*, F.  
*Sphegina clunipes*, Fln.  
*Ascia podagrica*, F.  
*Rhingia rostrata*, L.  
*Brachyopa bicolor*, Fln.  
*Volucella bombylans*, L.  
 — *pellucens*, L.  
 — *inflata*, F.  
 — *inanis*, L.  
*Sericomyia borealis*, Fln.  
 — *lappona*, L.  
*Arctophila mussitans*, F.  
*Eristalis sepulchralis*, L.  
 — *tenax*, L.  
 — *intricarius*, L.  
 — *arbustorum*, L.  
 — *pertinax*, Scop.  
 — *horticola*, Deg.  
*Myiatropa florea*, L.  
*Helophilus trivittatus*, F. Col. Yerbury  
 — *pendulus*, L.  
*Mallota eristaloides*, Lw.  
*Merodon equestris*, F.  
*Criorrhina ruficauda*, Deg.  
 — *berberina*, F.  
 — *asilica*, Fln. Col. Yerbury  
 — *oxyacanthæ*, Mg.  
 — *floccosa*, Mg.  
*Pocota apiformis*, Schr. Col. Yerbury  
 Mr. L. Chawner.  
*Brachypalpus bimaculatus*, Mcq.  
*Xylota segnis*, L.  
 — *lenta*, Mg.  
 — *nemorum*, F. Col. Yerbury  
 — *florum*, F.  
 — *sylvarum*, L.  
*Syritta pipiens*, L.  
*Eumerus sabulorum*, Fln.  
 — *ornatus*, Mg.  
*Chrysochlamys cuprea*, Scop.  
*Spilomyia speciosa*, Rossi.  
*Chrysotoxum sylvarum*, Mg.  
 — *octomaculatum*, Curt.  
 — *elegans*, Lw. Col. Yerbury  
 — *festivum*, L.  
 — *bicinctum*, L.  
*Callicera ænea*, F.  
*Microdon apiformis*, Deg. } (?) J. C. Dale  
 = *mutabilis*, Pz. } (Curt. Ent.)

### CONOPIDÆ

*Conops vesicularis*, L.  
 — *quadrifasciatus*, Deg.

*Conops ceriiformis*, Mg.  
 — *flavipes*, L.  
*Physocephala nigra*, Deg.  
 — *rufipes*, F. Col. Yerbury  
*Oncomyia atra*, F.  
*Sicus ferrugineus*, L.  
*Myopa buccata*, L. Col. Yerbury  
 — *testacea*, L.  
 — *polystigma*, Rond.  
 — *ephippium*, F. Col. Yerbury

### MUSCIDÆ

*Meigenia floralis*, Mg. Col. Yerbury  
*Ceromasia stabulans*, Mg.  
 — *spectabilis*, Mg. (?) Col. Yerbury  
 — *senilis*, Mg. „  
*Gymnochæta viridis*, Fln.  
*Exorista vetula*, Mg.  
 — *cheloniz*, Rond. Col. Yerbury  
 — *flavicans* (Mcq.) Rond. „  
 — *fimbriata*, Mg.  
*Epicampocera ambulans*, Mg. (?)  
 — *vulgaris*, Fln. Col. Yerbury  
*Blepharidea vulgaris*, Fln.  
*Frontina spec. nov.* (?) Col. Yerbury  
*Phorocera cilipeda*, Rond.  
*Bothria assimilis*, Fln.  
 — *cæsifrons*, Mg.  
 — *segregata*, Rond. Col. Yerbury  
*Sisyropa excisa*, Fln. Mr. W. R. O. Grant  
*Eutachina larvarum*, L. (?) „  
 — *rustica*, Mg.  
*Gonia fasciata*, Mg. Col. Yerbury  
*Aporomyia dubia*, Fln.  
*Somoleja rebaptizata*, Rond.  
*Melanota volvulus*, F.  
*Macquartia dispar*, Fln. Col. Yerbury  
*Ptilops chalybeata*, Mg.  
*Degeeria convexifrons*, Ztt.  
*Thelaira leucozona*, Pz. } Col. Yerbury  
 and var. *nigripes*, F. }  
*Demoticus longirostris*, Mg. „  
 — *frontata*, Boh.  
*Myobia fenestrata*, Mg.  
 — *inanis*, Fln.  
*Oliviera lateralis*, F.  
*Ocypterula pusilla*, Mg. Col. Yerbury  
*Micropalpus vulpinus*, Fln.  
*Erigone radicum*, F. Col. Yerbury  
 — *strenua*, Mg.  
 — *vivida*, Ztt. (?) Col. Yerbury  
 — *rudis*, Fln.  
*Tachina grossa*, L.  
 — *fera*, L.  
*Servillia lurida*, F.  
 — *ursina*, Mg.  
*Plagia ruralis*, Fln.  
*Phorichæta carbonaria*, Pz. Col. Yerbury  
*Bigonichæta spinipennis*, Mg.

# A HISTORY OF HAMPSHIRE

*Thryptocera pilipennis*, Fln.  
*Blepharomyia amplicornis*, Ztt. Col. Yerbury  
*Siphona geniculata*, Deg.  
*Alophora hemiptera*, F.  
 — *pusilla*, F. Col. Yerbury  
*Trixa œstroidea*, Rob.  
 — *ferruginea*, Mg.  
 — *grisea*, Mg.  
*Fortisia fœda*, Mg. Col. Yerbury  
*Redtenbacheria insignis*, Egg. Col. Yerbury  
*Phyto melanocephala*, Mg.  
*Stevenia maculata*, Fln.  
*Melanophora atra*, Mcq.  
*Brachycoma devia*, Rond. Col. Yerbury  
*Clista œneiscens*, Mde. „  
*Tephromya grisea*, Mg. „  
*Sarcophaga carnaria*, L.  
 — *similis*, Mde. Col. Yerbury  
 — *atropos*, Mg. (?)  
 — *vulnerata*, Sch. }  
     *hæmorrhœa*, Mde. }  
 — (?) *hæmorrhœa*, Mg. (?) Col. Yerbury  
 — *clathrata*, Mg. (?)  
 — *agricola*, Mde. Col. Yerbury  
*Cynomyia mortuorum*, L.  
 — *sepulchralis*, Mg.  
*Sarcophila latifrons*, Fln. Col. Yerbury  
*Nyctia halterata*, Pz.  
*Melanomyia nana*, Mg.  
*Miltogramma punctata*, Mg.  
*Metopia campestris*, Fln.  
 — *leucocephala*, Rossi.  
 — *argentata*, Mcq. Col. Yerbury  
*Arrenopus piligena*, Rond.  
*Macronychia agrestis*, Fln.  
*Dexiosoma caninum*, F.  
*Dexia rustica*, F.  
 — *vacua*, Fln. Col. Yerbury  
*Myiostoma cristata*, Mg. Col. Yerbury  
*Dinera grisescens*, Fln.  
*Myiocera carinifrons*, Fln.  
*Stomoxys calcitrans*, L.  
*Hæmatobia stimulans*, Mg. Col. Yerbury  
*Pollenia rudis*, F.  
 — *vespillo*, F.  
*Musca domestica*, L.  
 — *corvina*, F.  
*Graphomyia maculata*, Scop.  
*Myiospila meditabunda*, F.  
*Cyrtoneura curvipes*, Mcq.  
 — *simplex*, Lw. Col. Yerbury  
 — *stabulans*, Fln.  
 — *pabulorum*, Fln. Col. Yerbury.  
*Mesembrina meridiana*, L.  
*Calliphora grœnlandica*, Ztt.  
 — *azurea*, Fln.  
 — *cognata*, Mg. Col. Yerbury.  
 — *micans*, Mg.  
 — *erythrocephala*, Mg.  
 — *vomitioria*, L.

*Pyrellia cadaverina*, L. Col. Yerbury  
 — (?) *lasiophthalma*, Mg. „  
 — (?) *eriphthalma*, Mg. „  
*Lucilia cornicina*, F.  
 — *cæsar*, L.  
*Gastrophilus equi*, F.  
*Pharyngomyia picta*, Mg. Mr. Samouelle  
 (Curt. Ent.)

## ANTHOMYIDÆ

*Polietes lardaria*, F.  
*Hyetodesia lucorum*, Fln.  
 — *marmorata*, Ztt.  
 — *serva*, Mg.  
 — *carbo*, Schnr.  
 — *læta*, Fln.  
 — *signata*, Mg.  
 — *erratica*, Fln.  
 — *basalis*, Ztt.  
 — *variegata*, Mg.  
 — *scutellaris*, Fln. }  
     = *populi*, Mg. }  
 — *pallida*, F.  
 — *flaveola*, Fln.  
*Mydæa urbana*, Mg.  
 — *affinis*, Mde.  
 — *pagana*, F.  
 — *nigricolor*, Fln.  
 — *impuncta*, Fln.  
 — *separata*, Mg.  
*Spilogaster maculosa*, Mg.  
 — *quadrimaculata*, Fln.  
 — *duplaris*, Ztt.  
 — *duplicata*, Mg.  
 — *communis*, Dsv.  
 — *tetrastigma*, Mg.  
 — *flagripes*, Rond.  
 — *uliginosa*, Fln.  
 — *fuscata*, Fln.  
 — *trigonalis*, Mg. Mr. G. H. Verrall  
 — *ciliatocosta*, Ztt.  
*Hydrotæa irritans*, Fln.  
*Ophyra leucostoma*, W.  
*Tricophthicus cunctans*, Mg.  
 — *semipellucidus*, Ztt.  
 — *pulcher*, Mde.  
*Acanthiptera inanis*, Fln.  
*Hydrophoria ambigua*, Fln.  
 — *divisa*, Mg.  
 — *brunneifrons*, Ztt.  
 — *linogriesa*, Mg.  
*Hylemyia virginea*, Mg.  
 — *variata*, Fln.  
 — *strigosa*, F.  
 — *nigrimana*, Mg.  
*Mycophaga fungorum*, Deg.  
*Anthomyia pluvialis*, L.  
 — *radicum*, L.  
*Pegomyia rufipes*, Fln.



## INSECTS

*Pegomyia Winthemi*, Mg.

- *latitarsis*, Ztt.
- *bicolor*, W.
- *nigritarsis*, Ztt.
- *fulgens*, Mg.
- *versicolor*, Mg.
- *flavipes*, Fln.
- *transgressa*, Ztt.
- *tenera*, Ztt.

*Homalomyia aprica*, Hal.

- *Roserii*, Rond.
- *scalaris*, F.
- *canicularis*, L.
- *incisurata*, Ztt.
- *serena*, Fln.

*Azelia Macquarti*, Ztt.

- *triquetra*, Wdm.

*Caricea tigrina*, F.

*Cœnosia elegantula*, Rnd.

- *sexnotata*, Mg.

*Lipse litorea*, Fln. Col. Yerbury

### CORDYLURIDÆ

*Cordylura pubera*, L.

- *ciliata*, Mg. Col. Yerbury
- *albipes*, Fln.
- *umbrosa*, Lw. Col. Yerbury

*Norellia spinimana*, Fln.

*Clidogastra apicalis*, Mg. Col. Yerbury

*Hydromyza livens*, F.

*Trichopalpus fraternus*, Mg.

*Amaurosoma fasciata*, Mg.

*Ceratinostoma ostiorum*, Hal. Col. Yerbury

*Scatophaga analis*, Mg.

- *scybalaria*, L.
- *spurca*, Mg. Col. Yerbury
- *lutaria*, F.
- *inquinata*, Mg.
- *stercoraria*, L.
- *merdaria*, F.
- *litorea*, Fln. Col. Yerbury
- *squalida*, Mg. „

### HELOMYZIDÆ

*Helomyza flava*, Mg.

- *rufa*, Fln. Col. Yerbury

*Heteromyza atricornis*, Mg.

*Tephrochlamys rufiventris*, Mg.

### SCIOMYZIDÆ

*Actora æstuum*, Mg. Col. Yerbury

*Dryomyza anilis*, Fln.

- *flaveola*, F.

*Neottiophilum præustum*, Mg.

*Sciomyza dubia*, Fln. Col. Yerbury

- *pallida*, Fln. „
- *albocostata*, Fln.
- *obtusa*, Fln.
- *cinerella*, Fln.

*Sciomyza lata*, Schnr.

*Phæomyia fuscipennis*, Mg.

*Tetanocera elata*, F. Col. Yerbury

- *sylvatica*, Mg.
- *robusta*, Lw. Col. Yerbury
- *ferruginea*, Fln.
- *punctata*, F.
- *reticulata*, L.
- *umbrarum*, L. Col. Yerbury

*Limnia marginata*, F.

- *unguicornis*, Scop.

— *rufifrons*, F.

*Elgiva dorsalis*, F.

- *rufa*, Pz.

— *cucularia*, F.

*Sepedon spegeus*, F.

### PSILIDÆ

*Psila fimetaria*, L.

- *rosæ*, F.

— *nigricornis*, Mg.

*Chyliza leptogaster*, Pz.

*Loxocera aristata*, Pz.

- *albiseta*, Schrk.

*Lissa loxocerina*, Fln.

### MICROPEZIDÆ

*Micropeza corrigiolata*, L.

*Calobata petronella*, L.

### ORTALIDÆ

*Dorycera graminum*, F.

*Petropæctria nigrina*, Mg.

- *paludum*, Fln. Col. Yerbury

— *palustris*, Mg. „

*Rivellia syngenesiæ*, F.

*Scoptera vibrans*, L.

### TRYPETIDÆ

*Acidia heraclei*, L.

- *lychnidis*, F.

*Spilographa Zoë*, Mg.

*Trypeta onotrophes*, Lw.

*Sphenella marginata*, Fln.

*Carphotricha guttularis*, Mg.

- *pupillata*, Fln.

*Tephritis miliaria*, Schrk.

- *parietina*, L.

— *vespertina*, Lw.

*Urellia stellata*, Fuessl.

### LONCHÆIDÆ

*Lonchæa vaginalis*, Fln.

*Palloptera ustulata*, Fln.

- *umbellatarum*, F.

— *saltuum*, L. Col. Yerbury

— *trimacula*, Mg.

*Toxoneura muliebris*, Har.

# A HISTORY OF HAMPSHIRE

## SAPROMYZIDÆ

*Peplomyza Wiedemanni*, L.  
*Papromyza lupulina*, F.  
 — *decempunctata*, Fln.  
 — *rorida*, Fln.  
 — *præusta*, Fln. Col. Yerbury.  
*Lauxania cylindricornis*, F.

## HETERONEURIDÆ

*Heteroneura albimana*, Mg.  
*Stomphastica flava*, Mg.

## OPOMYZIDÆ

*Balioptera tripunctata*, Fln.  
*Opomyza germinationis*, L.  
*Tetanura pallidiventris*, Fln. Col. Yerbury

## SEPSIDÆ

*Sepsis punctum*, F.  
 — *cynipsea*, L.  
 — *annulipes*, Mg.  
*Nemopoda cylindrica*, F.

## PIOPHILIDÆ

*Piophila casei*, L.

## EPHYDRIDÆ

*Ochthera mantis*, Deg.

## DROSOPHILIDÆ

*Drosophila transversa*, Fln.  
 — *cameraria* Hal.  
*Stegana coleoptrata*, Scop.

## CHLOROPIDÆ

*Lipara lucens*, Mg. Col. Yerbury  
*Eurina lurida*, Mg.  
*Meromyza pratorum*, Mg. " Col. Yerbury  
 — *variegata*, Mg.  
 — *læta*, Mg. Col. Yerbury  
*Chlorops tæniopus*, Mg.  
 — *scalaris*, Mg.  
*Chloropisca glabra*, Mg.

## BORBORIDÆ

*Borborus niger*, Mg.  
 — *equinus*, Fln.  
 — *vitripennis*, Mg.  
 — *geniculatus*, Mcq.  
*Sphærocera subsaltans*, F.  
*Limosina limosa*, Fln.

## PHORIDÆ

*Conicera atra*, Mg.  
*Phora flava*, Fln.  
 — *maculata*, Mg.  
 — *crassicornis*, Mg.  
 — *incrassata*, Mg.

## HIPPOBOSCIDÆ

*Hippobosca equina*, L.  
*Ornithomyia avicularia*, L. Miss Chawner  
*Melophagus ovinus*, L.

# HEMIPTERA

*Bugs, etc.*

## HETEROPTERA

### GYMNOCERATA

#### PENTATOMINA

#### SCUTELLERIDÆ

*Corimelæna*, White  
 — *scarabæoides*, Lin. Bournemouth  
*Odontoscelis*, Lap.  
 — *fuliginosa*, Lin. Isle of Wight  
*Podops*, Lap.  
 — *inuncta*, Fab. Isle of Wight

#### CYDNIDÆ

*Æthus*, Dall  
 — *flavicornis*, Fab. Isle of Wight  
*Sehirus*, Am. S.  
 — *bicolor*, Lin. Parley Heath

#### CYDNIDÆ (continued)

*Sehirus dubius*, Scop. Isle of Wight  
 — *biguttatus*, Lin. Parley Heath  
 — *morio*, Lin. Isle of Wight  
*Gnathoconus*, Fieb.  
 — *albomarginatus*, Fab. Isle of Wight  
 — *picipes*, Fall. "

#### PENTATOMIDÆ

*Ælia*, Fab.  
 — *acuminata*, Lin. Isle of Wight  
*Neottiglossa*, Curt.  
 — *inflexa*, Wolff. New Forest  
*Eysarcoris*, Hahn.  
 — *melanocephalus*, Fab. New Forest  
 — *æneus*, Scop. New Forest  
*Strachia*, Hahn.  
 — *oleracea*, Lin. Isle of Wight



# INSECTS

## ASOPIDÆ

- Asopus, Burm.
- punctatus, Lin. *Bournemouth*
- Zicrona, Am. S.
- cœrulea, Lin. *Isle of Wight*

## ACANTHOSOMIDÆ

- Acanthosoma, Curt.
- dentatum, De G. *Parley Heath*

## COREINA

### COREIDÆ

- Enoplops, Am. S.
- scapha, Fab. *Isle of Wight*
- Verlusia, Spin.
- rhombea, Lin. *Bournemouth*
- Coreus, Fab.
- denticulatus, Scop. *Bournemouth*

### ALYDIDÆ

- Alydus, Fab.
- calcaratus, Lin. *Bournemouth*

### STENOCEPHALIDÆ

- Stenocephalus, Latr.
- agilis, Scop. *Isle of Wight*
- neglectus, H.S. *New Forest*

### CORIZIDÆ

- Therapha, Am. S.
- hyoscyami, Lin. *Isle of Wight*
- Corizus, Fall.
- crassicornis, Lin. *Bournemouth*
- maculatus, Fieb. *New Forest*
- capitatus, Fab. *Parley Heath*
- parumpunctatus, Schill. *Bournemouth*
- Myrmus, Hahn.
- myriformis, Fall. *Hants*

## BERYTINA

### BERYTIDÆ

- Neides, Latr.
- tipularius, Lin. (macr.). *Parley Heath*
- Berytus, Fab.
- clavipes, Fab. *Isle of Wight*
- minor, H.S. "
- montivagus, Fieb. "
- crassipes, H.S. *Bournemouth*

### METACANTHIDÆ

- Metatropis, Fieb.
- rufescens, H.S. *New Forest*

## LYGÆINA

### LYGÆIDÆ

- Nysius, Dall.
- lineatus, Cost. *Bournemouth*

### PACHYMERIDÆ

- Plociomerus, Say.
- fracticollis, Schill. *New Forest*
- luridus, Hahn. "

### PACHYMERIDÆ (continued)

- Rhyparochromus, Curt.
- antennatus, Schill. *Isle of Wight*
- dilatatus, H.S. *Parley Heath*
- Tropistethus, Fieb.
- holosericeus, Schltz. *Isle of Wight*
- Plinthisus, Fieb.
- brevipennis, Latr. *Isle of Wight*
- Acompus, Fieb.
- rufipes, Wolff. *New Forest*
- Stygnus, Fieb.
- rusticus, Fall. *Isle of Wight*
- Peritrechus, Fieb.
- geniculatus, Hahn. *New Forest*
- luniger, Schill. *Bournemouth*
- Trapezonotus, Fieb.
- distinguendus, Flor. *Isle of Wight*
- Aphanus, Lap.
- lynceus, Fab. *Isle of Wight*
- pini, Lin. *New Forest*
- Beosus, Am. S.
- luscus, Fab. *Parley Heath*
- Monanthia, Lep.
- ampliata, Fieb. *New Forest*
- quadrimaculata, Wolff. "
- dumetorum, H.S. "
- simplex, H.S. "
- humuli, Fab. "

## ARADINA

- Aradus, Fab.
- depressus, Fab. *New Forest*
- corticalis, Lin. "

## HEBRINA

- Hebrus, Curt.
- pusillus, Fall. *New Forest*

### GERRIDÆ

- Gerris, Fab.
- najas, De G. *New Forest*
- argentata, Schum. "

## REDUVIINA

### REDUVIIDÆ

- Coranus, Curt.
- subapterus, De G. *Bournemouth*

## SALDINA

- Salda, Fab.
- saltatoria, Lin. *Isle of Wight*
- arenicola, Scholtz. *Bournemouth, Isle of Wight*
- C-album, Fieb. *Isle of Wight*
- lateralis, Fall. "
- Cocksii, Curt. *New Forest*

# A HISTORY OF HAMPSHIRE

## CIMICINA

### CIMICIDÆ

- Cimex, Lin.
- pipistrelli, Jen. *New Forest*

### ANTHOCORIDÆ

- Anthocoris, Fall.
- confusus, Reut. *Isle of Wight*
- Acetropis, Fieb.
- Gimmerthalii, Flor. *New Forest*
- Lopus, Hahn.
- flavomarginatus, Don. *Fareham*
- sulcatus, Fieb. *Isle of Wight*
- Miridius, Fieb.
- quadrivirgatus, Costa. *Isle of Wight*
- Calocoris, Fieb.
- fulvomaculatus, De G. *New Forest*
- chenopodii, Fall. *Isle of Wight*
- ticinensis, Mey.
- seticornis, Fab. *Isle of Wight*
- striatus, Lin. *New Forest*
- Dichroscytus, Fieb.
- rufipennis, Fall. *Bournemouth*
- Lygus, Hahn.
- cervinus, H.S. *Isle of Wight*
- Strongylocoris, Costa.
- leucocephalus, Lin. *Isle of Wight, Bournemouth*
- Dicyphus, Fieb.
- annulatus, Wolff. *Isle of Wight*
- Orthotylus, Fieb.
- flavosparsus, Sahlb. *Isle of Wight*
- Amblytulus, Fieb.
- affinis, Fieb. *Isle of Wight*
- Subg. Glænocorixa, Thoms.
- carinata, Sahlb.
- Sharpi*, D. & S.
- var. variegata*, Wal.
- intricata*, D. & S.
- cavifrons, Thoms.
- alpestris*, D. & S.
- Subg. Cymatia, Flor.
- Bonsdorffi, Sahlb
- coleoptrata, Fab.

## ANTHOCORIDÆ (continued)

- Sigara, Fab.
- minutissima, Lin.
- Scholtzii, Fieb.

*P.S.*—Water-bugs occur no doubt as commonly in Hampshire as elsewhere, but I have no record of any species.—E. SAUNDERS.

## HEMIPTERA—HOMOPTERA

### CICADINA

#### CICADIDÆ

- Cicadetta, Am.<sup>1</sup>
- montana, Scop. *New Forest*

#### CIXIIDÆ

- Oliarus, Stål.
- leporinus, Lin. *New Forest*
- pallidus*, H. S.
- Panzeri, Löw. *Isle of Wight*
- leporinus*, Panz.
- Cixius, Latr.
- nervosus, Lin. *Isle of Wight*
- intermedius*, Scott.
- Scotti, Edw. *Isle of Wight*
- simplex*, Scott.
- remotus, Edw. *Isle of Wight*
- similis*, Scott.

#### DELPHACIDÆ

- Asiraca, Latr.
- clavicornis, Fab. *Isle of Wight*
- Delphax, Fab.
- pulchella, Curt. *Isle of Wight*
- Liburnia, Stål.
- longipennis, Curt. *Isle of Wight*
- smaragdula, Stål. ”
- glaucescens, Fieb. ”
- Chlorina
- prasinula, Fieb. *Isle of Wight*
- æmulatrix*, Scott.
- distincta, Flor. *Bournemouth*
- Fieberi, Scott. *Isle of Wight*
- leptosoma, Flor. *Bournemouth*

<sup>1</sup> This species was formerly known as *Cicada hæmatoides*. It is the only true species of *Cicada* occurring in England, and has hitherto not been found out of the New Forest. It was first taken there in 1858, by the late Mr. Farren of Cambridge, who found it sitting on the stem of the common brake, having been attracted to it by its peculiar humming noise. In June, 1862, Mr. Farren caught two more specimens and heard others. Since then the species has become well known, and specimens are constantly heard and captured.



## MYRIAPODA

### *Centipedes and Millipedes*

Very little is known of the Centipedes and Millipedes of Hampshire. No one in the county has systematically studied them, and the species contained in the subjoined list were casually collected in the Isle of Wight by Mr. Oldfield Thomas, in the New Forest by Mr. F. W. Frohawk, Mr. C. O. Waterhouse and the Rev. H. S. Gorham, and in Shirley Warren, Southampton, by the Rev. H. S. Gorham.

The list comprises about one-third of the known British species. That it could be doubled, perhaps trebled, without difficulty cannot be doubted. Indeed it is impossible to allege any reason why, with one or two exceptions, all the recorded British species should not be discovered in Hampshire, with its varied physical features and exceptional extent of woodland. For the most part these animals are to be found under stones, logs of wood or decaying vegetation; in fact wherever dampness and shade are afforded. Millipedes are vegetable feeders. Centipedes, on the contrary, are carnivorous, and feed largely upon worms. Hence they are especially abundant in situations where the disintegration of rocks and decomposition of vegetable matter supply a sufficient depth of damp earth to accommodate their prey. Two interesting exceptions to this rule are met with in *Linotaenia maritima* and *Geophilus submarinus*, which, as suggested in each case by the specific name, live in the sea. Both have been found under stones between tide-marks in the English Channel, and exist no doubt on the Hampshire coast.

List of the species :—

### CHILOPODA

#### *Centipedes*

### LITHOBIOMORPHA

#### LITHOBIIDÆ

1. *Lithobius forficatus* (Linné.).

This, the largest species of the genus found in England, and may be commonly met with in gardens and the vicinity of houses.

Southampton. *Syst. Nat.*, ed. 10, p. 638, 1758 (*Scolopendra*).

2. *Lithobius variegatus*, Leach.

This species is confined to the British and the Channel Islands. It is nearly as large as *L. forficatus*, but is yellower and marbled with black.

Isle of Wight, Osborne. *Trans. Linn. Soc. Zool.*, xi. p. 382, 1815.

3. *Lithobius melanops*, Newport.

Isle of Wight, Freshwater; New Forest. *Trans. Linn. Soc. Lond.*, xix. p. 371, 1845.

4. *Lithobius calcaratus*, C. Koch.

New Forest. *Deutsch. Crust.*, etc. 40, No. 23, 1844.

# A HISTORY OF HAMPSHIRE

## SCOLOPENDROMORPHA

### CRYPTOPIDÆ

5. *Cryptops hortensis*, Leach.

This is the only species of the Scolopendromorpha which is certainly indigenous to Great Britain. It is widely distributed, and is commonly met with in gardens, under stones, etc.

Isle of Wight, Freshwater ; Southampton, Shirley Warren. *Trans. Linn. Soc. Lond.*, xi. p. 384, 1815.

## GEOPHILOMORPHA

### GEOPHILIDÆ

6. *Geophilus longicornis*, Leach.

Isle of Wight, Freshwater ; New Forest. *Trans. Linn. Soc. Lond.*, xi. p. 386, 1815.

7. *Geophilus carpophagus*, Leach.

New Forest. *Trans. Linn. Soc. Lond.*, xi. p. 384, 1815.

8. *Linotænia crassipes*, C. Koch.

This is the commonest of the luminous centipedes. It frequently attracts attention by emitting its phosphorescent matter on damp evenings in the autumn.

Isle of Wight, Freshwater. *Deutschl. Crust.*, etc., pl. 3, no. 3, 1835 (*Geophilus*).

9. *Stigmatogaster subterraneus*, Leach.

New Forest ; Southampton, Shirley Warren. *Trans. Linn. Soc. Lond.*, xi. p. 385, 1815.

## DIPLOPODA

### *Millipedes*

### PSELAPHOGNATHA

### POLYXENIDÆ

10. *Polyxenus lagurus*, Linné.

New Forest. *Syst. Nat.*, ed. 10, p. 637, 1758.

### CHILOGNATHA

## ONISCOMORPHA

### GLOMERIDÆ

11. *Glomeris marginata*, Villers.

This is the common 'pill millipede.' It closely resembles a wood-louse in external form.

Isle of Wight, Yarmouth. *Linn. Ent.*, iv. p. 187, pl. xi., f. 15, 1789 (*Oniscus*).



## SPIDERS

### HELMINTHOMORPHA

#### CHORDEUMIDÆ

12. *Atractosoma polydesmoides*, Leach.

Isle of Wight, Osborne. *Trans. Linn. Soc. Lond.*, xi. p. 380, 1815 (*Craspedosoma*).

#### IULIDÆ

13. *Blaniulus guttulatus*, Bosc.

This species is commonly found in strawberries.

Southampton, Shirley Warren. *Bull. Soc. Philom. Paris*, p. 12, 1792 (*Iulus*).

14. *Iulus britannicus*, Verhoeff.

Isle of Wight, Osborne. *Berl. Ent. Zeits.*, xxxvi. p. 148, 1891.

15. *Iulus tutonicus*, Pocock.

Southampton, Shirley Warren. *Ann. Mag. Nat. Hist.*, July, 1900.

16. *Iulus punctatus*, Leach.

Isle of Wight, Shanklin ; New Forest. *Trans. Linn. Soc. Zool.*, xi. p. 379, 1815.

17. *Iulus niger*, Leach.

Isle of Wight, Osborne and St. Lawrence. *Loc. cit.*, p. 378.

## ARACHNIDA

### *Spiders, etc.*

So very little research has been made in connection with members of this order, so far as the county of Hampshire is concerned, that it is not possible to consider the following account of the spider-fauna of the region under consideration in any respect a full one.

That it should prove an unusually rich locality, when thoroughly well worked, is evident from a very cursory glance at the physical characters and geological formation of the area. Chalk downs, with rich meadow lowlands, river banks, and broad estuaries and harbours with rich alluvial shores, such as at Lymington, Portsmouth and Hayling Isle, not to speak of the immense tracts of heath country covering the Bagshot beds and the Hamstead formation, both clothed with oak and pine, blackthorn, hazel, and every variety of forest tree and shrub, with rich herbage on all sides. Such a district cannot fail to be as exceedingly prolific in spiders, harvestmen, and false-scorpions as it is in other groups of the Articulata.

It is scarcely possible to point particularly to any one tract as more likely to repay research than another, except that in a general way wild, uncultivated districts are much more prolific than those that are highly cultured. Yet even in the latter case, where isolated areas of

## A HISTORY OF HAMPSHIRE

wild growth and forest land occur, with cultivated land on all sides, these oases are often found to be more plentifully inhabited than even huge tracts of primeval forest.

Of the three main formations, the one which may be regarded as less prolific than the others is that of the Chalk, while the Bagshot and Hamstead beds are probably both about equally fertile in spiders and their kindred forms. The valleys of the Stour, Avon, Test, Itchen and other streams would specially repay working, as also would the entire coastline from Bournemouth to Hayling Isle, more especially the alluvial deposits, with their marsh lands, lying round the mouths of the rivers and the various harbours. The Isle of Wight should also prove a rich locality, with its warm undercliffs and deep chines and southern aspect. While 550 and upwards of species are recorded from England and Wales, 153 species are all that have been placed to the credit of Hampshire. For beyond a certain amount of general collecting done in the neighbourhood of Brockenhurst, Ringwood, Lymington, and at Osborne, in the Isle of Wight, there has been no real effort made, even in the New Forest itself, to gain an exhaustive knowledge of the Arachnid fauna of the county. And it is quite certain that not only might the subjoined list be considerably increased, but that many species new to Great Britain, and also to science, remain yet to be discovered.

Of the 153 species of spiders recorded, four only are peculiar to the district, so far as our present knowledge goes, namely, *Cælotus terrestris*, *Philodromus rufus*, *Menemerus melanognathus*, and *Oxyopes lineatus*, while of the rarer forms, of which only one or two have been taken outside the county borders, we have *Eresus cinnabarinus*, *Hyptiotes paradoxus*, *Uloborus walckenaërius*, *Philodromus lineatipes*, *Dictyna flavescens*, *Teutana grossa*, *Dipæna melanogaster*, *Ero tuberculata*, *Linyphia furtiva*, *Araneus angulatus*, *Salticus formicarius*, *Pistius truncatus*, *Thanatus formicinus*, and *Atypus affinis*. Of the latter, many examples have been taken elsewhere; but the spider is of sufficient interest to make a special mention of it desirable.

Of the *Phalangidea*, or harvestmen, one only deserves particular notice, *Anelasmacephalus cambridgii*. The localities given in the following list are well authenticated, and the initials of those who collected the specimens or recorded their occurrence are added. The greater part of the species recorded from Osborne, Isle of Wight, were collected by the late Colonel A. Pickard, R.H.A., V.C., while those taken elsewhere were collected by Cecil Warburton, Esq., the Rev. O. Pickard-Cambridge, and the present writer.

In cases where the generic or specific name quoted is not that under which the spider has usually been recognised in the works of English authors, a note has been added calling attention to the fact. With these few preliminary remarks, we may proceed at once with the list of the spiders of Hampshire.



## SPIDERS

### ARANEÆ

#### MYGALOMORPHÆ

#### ATYPIDÆ

Spiders with eight eyes, four lung books, and three tarsal claws.

*Atypus affinis*, Eichwald.

Isle of Wight, Ventnor (O. P.-C.). Adult in May, June, and October.

This, the only example of the *Mygalomorphæ* found in the British Islands, has not apparently been taken in any part of the Hampshire mainland. There need not however be the smallest doubt that it occurs here and there throughout the heather-clad moorlands of the New Forest, and also possibly along the coast. Though belonging to the same sub-order as the well-known trap-door spiders of the south of Europe and other tropical and sub-tropical regions, distinguished from the *Arachnomorphæ* by the possession of two pairs of pulmonary organs, or lung books, and by the vertical movement of the mandibles, these spiders make no trap-door at all.

The retreat consists of a long tunnel, half an inch in diameter and from seven to nine inches long, burrowed in the soil, and lined throughout with white silk, terminating at the lower end in a slightly enlarged cell, where the egg-sac is formed and the young are hatched, and tended by the female. The upper end of the silk lining is prolonged for about three inches beyond the extremity of the burrow, forming a loose tube, closed at the end, and either lying on the surface of the soil, woven amongst the roots of heather and herbage, or hanging down free, according to the nature of the surroundings.

Mr. Enock reports that the spider does not leave this retreat in search of prey, but waits in the slack portion of the tube lying outside the burrow until some insect sets foot upon this silken, purse-like structure. Instantly the fangs of the spider's mandibles are struck through the walls of the tube, the insect seized and dropped into the burrow through a rent in the silk, which is afterwards mended from within. The male is smaller, almost black, and may sometimes be found moving slowly about in the sunshine in the neighbourhood of the colony. The species occurs all along the coast from Hastings to the Land's End, and in various localities inland. The spider has also been recorded under the names *A. sulzeri* and *A. piceus* by English authors.

#### ARACHNOMORPHÆ

#### DYSDERIDÆ

Spiders with six eyes and two pairs of stigmatic openings, situated close together on the genital rima; the anterior pair communicating with lung books, the posterior with tracheal tubes. Tarsal claws, two in *Dysdera* and *Segestria*, three in *Harpactes*.

## A HISTORY OF HAMPSHIRE

*Dysdera cambridgii*, Thorell.

Bournemouth (O. P.-C.), May and June.

Not uncommon under stones and bark of trees, where it lurks within a tubular retreat. The spider is easily recognisable by its elongate form, orange legs, dark mahogany carapace and pale clay-yellow abdomen. Though most certainly occurring throughout the country and in the Isle of Wight, it has been recorded only from the south coast.

*Harpactes bombergii* (Scopoli).

New Forest, Brockenhurst, June.

Common under bark of trees and fallen timber, and recognisable by its ant-like linear form, black carapace, and pale abdomen.

*Segestria senoculata* (Linnæus).

New Forest, Brockenhurst, June.

Not uncommon under bark of trees, amongst detached rocks at the foot of cliffs, and in the crevices of loose stone walls. Recognisable by its linear form and the black, diamond-shaped blotches on the dorsal surface of the abdomen.

### DRASSIDÆ

Spiders with eight eyes, situated in two transverse rows. The tracheal openings lie just in front of the spinners. The tarsal claws are two in number, the anterior pair of spinners are set wide apart at the base, and the maxillæ are more or less impressed across the middle.

*Drassodes lapidosus* (Walckenaer).

Bournemouth, June.

Usually common beneath stones on the sea-coast, and also inland, throughout the British Islands.

*Ghaphosa lugubris*, C. L. Koch.

New Forest, Brockenhurst, June.

### CLUBIONIDÆ

Spiders with eight eyes, situated in two transverse rows. The tracheal openings lie immediately in front of the spinners. The tarsal claws are two in number, but the anterior pair of spinners are set close together at their base, and the maxillæ are convex, and not impressed in the middle.

*Micaria pulicaria* (Sundevall).

New Forest, Brockenhurst, June.

*Phrurolithus festivus*, C. L. Koch.

Isle of Wight, Ventnor, June.

*Liocranum rapicola* (Walch).

Bournemouth (F. W. F.)

*Agræca brunnea* (Blackwall).

New Forest, Brockenhurst, June.

*Agræca proxima* (O. P.-C.).

Bournemouth, June.



## SPIDERS

*Zora spinimana* (Sundevall).

Southampton (O. P.-C.) ; New Forest, Brockenhurst, June.

*Clubiona compta*, C. L. Koch.

New Forest, Brockenhurst, June.

*Clubiona brevipes*, Blackwall.

Isle of Wight, Osborne (O. P.-C.) ; New Forest, Brockenhurst, June.

*Clubiona terrestris*, Westring.

New Forest, Brockenhurst, June.

*Clubiona reclusa*, O. P.-Cambridge.

New Forest, Brockenhurst, June.

*Chiracanthium erraticum* (Walckenaer).

New Forest, Brockenhurst (C. W.), June.

This spider is also known amongst English authors as *C. carnifex*.

*Chiracanthium lapidicolens*, Simon.

New Forest, Brockenhurst (C. W.), June.

This species is known also to English authors under the name of *C. nutrix*.

### ANYPHÆNIDÆ

The spiders of this family resemble those of the Clubionidæ in most respects, except that the tracheal stigmatic openings beneath the abdomen are situated about midway between the genital rima and the spinners, and not, as in the last family, immediately in front of the spinners. One species only is indigenous to Great Britain, and is very common amongst the foliage of trees in the months of May and June.

*Anyphæna accentuata* (Walckenaer).

New Forest, Brockenhurst (C. W.), June.

### HETEROPODIDÆ

Spiders with eight eyes, situated in two transverse rows, two tarsal claws, and anterior spinners situated close together at their base. The maxillæ are not impressed. It is very difficult to separate these systematically from the Clubionidæ, the sidelong movement of the legs, admitting of motion in any direction, being the chief characteristic.

*Micrommata roseus* (Clerck).

New Forest, Brockenhurst (C. Warburton), June.

This is the only British representative of the family of Heteropods, which in tropical and sub-tropical regions numbers hundreds of species, mostly of gigantic size. Their long legs and swift sidelong movements render them easy to identify. Our only indigenous species is by no means common, but is a very striking spider on account of its comparatively large size and brilliant green colour in the female sex. The male is smaller, with the green colour relieved by yellow and scarlet slashes. Both sexes run swiftly over the herbage in open spaces in woods in the

## A HISTORY OF HAMPSHIRE

sunshine, but are not so easily detected when quiescent. The spider is also known under the specific names, *virescens*, Clerck, and *smaragdulus*, Blackwall.

### THOMISIDÆ

Spiders with eight eyes, situated in two transverse rows, two tarsal claws, and anterior spinners close together at their base. Maxillæ not impressed. The crab-like shape and sidelong movements of these spiders are the chief characteristic, which enable them to be distinguished from the more elongate *Drassidæ* and *Clubionidæ*. Certain species of the family are hardly to be denied entrance into the *Heteropodidæ*.

*Philodromus margaritatus* (Clerck).

New Forest, Brockenhurst (C. W.), June.

This magnificent species, by far the largest of the genus found in Great Britain, is common in the New Forest and many other parts of England. Its mottled white, black and grey hues blend admirably with the lichen-covered trunks of the trees which they frequent, and unless the spiders move, it is almost impossible to see them. The beautiful variety *tigrinus*, De Geer also named *jejunus*, C. Koch, almost pure white with distinct black spots and blotches, is also fairly common in the Forest.

*Philodromus lineatipes*, O. P.-Cambridge.

New Forest, Lyndhurst (C. W.) ; Beaulieu Heath.

A rare species, hitherto taken only in Scotland, which has occurred recently in the New Forest and may be recognised in a general way by its hoary grey appearance, compared with *aureolus*, *cæspiticolus* and *emarginatus*, and more particularly by the dark brown line on the outer sides of the femora of the legs. It occurs in June on the low fir-trees growing on Beaulieu Heath.

*Philodromus aureolus* (Clerck).

New Forest (C. W.) ; Isle of Wight, Osborne (O. P.-C.), June.

One of the most abundant spiders in the country, and quite a nuisance to the collector in the Forest.

*Philodromus cæspiticolus* (Walckenaer).

New Forest, Brockenhurst, Beaulieu Heath, June.

A sub-species of *aureolus*, occurring in the same localities.

*Philodromus elegans* (Blackwall).

New Forest, Lyndhurst and Shirley Heath (O. P.-C.), September, but adult in the spring.

A rare spider, occurring occasionally in plenty in certain seasons.

*Philodromus dispar*, Walckenaer.

Beaulieu Heath, June.

*Philodromus fallax* (Sundevall).

Christchurch and Bournemouth (O. P.-C.).

Occurs on sand-hills.



## SPIDERS

*Philodromus rufus*, Walckenaer.

This species has only once been taken in England, and on that occasion in this county. 'From all our other known British species of *Philodromus* this very distinct one may easily be recognised, not only by its colours and markings, but by the peculiar form of the radial apophysis of the palpi. A single adult male was found by myself by sweeping among grass and coarse herbage in the swampy bottom of a small pond near Brockenhurst in the New Forest on the 12th of June, 1895.' (O. P.-C.).

*Tibellus oblongus* (Walckenaer).

New Forest.

Abundant amongst dry grass in most localities.

*Thanatus formicinus* (Clerck).

Beaulieu Heath (C. W.).

Only two females of this very distinct species, remarkable for its pale colouring and black lanceolate mark on the anterior portion of the abdomen, have hitherto been taken in England, and one of these in the New Forest.

*Diaea dorsata* (Fabricius).

New Forest, Brockenhurst.

*Misumena vatia* (Clerck).

New Forest, Brockenhurst.

*Thomisus onustus*, Walckenaer.

New Forest, Lyndhurst (O. P.-C. ; C. W.).

*Pistius truncatus* (Pallas).

New Forest, Brockenhurst.

*Xysticus cristatus* (Clerck).

New Forest, Brockenhurst, June.

*Xysticus pini* (Hahn).

New Forest, Brockenhurst (C. W.), June.

*Xysticus ulmi* (Hahn).

New Forest, Brockenhurst, June.

*Xysticus lanio*, C. L. Koch.

New Forest, Brockenhurst ; Southampton (O. P.-C.), June.

*Xysticus sabulosus* (Hahn).

New Forest, Beaulieu Heath. Adult in August.

*Xysticus bifasciatus*, C. L. Koch.

New Forest, (C. W.).

*Xysticus viaticus*, C. L. Koch.

Bournemouth (O. P.-C.).

## ATTIDÆ

The spiders of this family may be recognised in a general way by their mode of progression ; consisting of a series of leaps, often many

## A HISTORY OF HAMPSHIRE

times their own length. More particularly they may be known by the square shape of the cephalic region and the fact that the eyes are arranged in three rows of 4, 2, 2; the centrals of the anterior row being much the largest and usually iridescent. Those of the second row are the smallest, while the posterior pair is placed well back and helps to give the quadrate character to the carapace. Otherwise these spiders are simply specialized *Clubionids*, with two tarsal claws and other minor characters possessed in common with members of this latter family. They can be beaten from foliage, or found amongst herbage and under stones, both those lying on the ground and those forming loose walls. The commonest *Epiblemum scenicum*, will be well-known to all observers, running and leaping on the walls of houses in the bright sunshine.

*Attus pubescens* (Fabricius).

Southampton and Hursley (O. P.-C.).

*Epiblemum scenicum* (Clerck).

Southampton and the Isle of Wight, Osborne (O. P.-C.).

*Epiblemum cingulatum* (Panzer).

New Forest, Brockenhurst (C. W.).

*Menemerus melanognathus* (Lucas).

Isle of Wight, Freshwater (O. P.-C.).

A single example of this rare species recorded as *Salticus nigrolimbatus*, O. P.-Camb., has been taken in England.

*Marptusa muscosa* (Clerck).

Hampshire boundary, between Poole and Bournemouth (O. P.-C.).

*Ergane arcuata* (Clerck).

New Forest, Lyndhurst (O. P.-C.).

*Ergane falcata* (Clerck).

New Forest, Brockenhurst (C. W.).

*Euophrys petrensis*, C. L. Koch.

New Forest, Brockenhurst (C. W.).

*Euophrys frontalis* (Walckenaer).

New Forest, Brockenhurst.

*Neon reticulatus* (Blackwall).

New Forest, Brockenhurst.

*Phlegra fasciata* (Hahn).

New Forest (O. P.-C.).

*Aelurillus V.-insignitus* (Clerck).

Bournemouth (O. P.-C.).

*Ballus depressus* (Walckenaer).

New Forest, Brockenhurst (C. W.).

*Dendryphantes bastatus* (Clerck).

New Forest, Brockenhurst (C. W.).

*Heliophanus flavipes*, C. L. Koch.

New Forest, Brockenhurst (C. W.).



## SPIDERS

*Heliophanus cupreus* (Walckenær).

New Forest, Brockenhurst (C. W.).

*Salticus formicarius* (De Geer).

The Salterns, Lymington, August, 1865 ; taken by J. C. Dale, Esq. (O. P.-C.).

Three examples only of this very rare and striking species have been taken in Great Britain, and of these, one specimen in Hampshire. Its close resemblance to some species of *Hymenopteron*, possibly *Formica rufa*, the great wood-ant, renders it a very interesting and noticeable spider.

### OXYOPIDÆ

Spiders with eight eyes in four transverse rows, those of first row being smaller than the others. The legs are very spinose and the tarsal claws three in number. The spiders are found running about over the herbage or lurking in their loose irregular webs spun up amongst the leaves of shrubs. The species are mostly subtropical or tropical.

*Oxyopes lineatus* (Fabricius).

New Forest, Lyndhurst (O. P.-C.).

The only recorded specimens of this spider are from this county. The majority of the known species of the family are tropical or sub-tropical. The examples taken were all immature.

### PISAURIDÆ

Spiders with eight eyes in three rows, and three tarsal claws. The first row of eyes consists of four small eyes which are sometimes in a straight line, sometimes recurved and sometimes procurved. Those of the two other rows are situated in the form of a rectangle of various proportions. *Pisaura* runs freely over the herbage carrying its egg-sac beneath its sternum, while *Dolomedes* is a lover of marshes, swamps and fen country.

*Pisaura mirabilis* (Clerck).

New Forest, Brockenhurst, June.

*Dolomedes fimbriatus* (Clerck).

New Forest (C. W.).

### LYCOSIDÆ

The members of this family have also eight eyes, similarly situated to those of the *Pisauridæ*, but the first row is straight. There are three tarsal claws. The spiders are to be found running freely and carrying their egg-sac attached to the spinners. Many of the larger species, make a short burrow in the soil and there keep guard over the egg-sac.

*Lycosa leopardus* (Sundevall).

New Forest, Brockenhurst, June.

*Lycosa terricola* (Thorell).

New Forest, Brockenhurst, June ; Southampton (O. P.-C.).

## A HISTORY OF HAMPSHIRE

*Lycosa pulverulenta* (Clerck).

New Forest, Brockenhurst, June.

*Pardosa lugubris* (Walckenaer).

New Forest, Brockenhurst ; Southampton (O. P.-C.), April and May.

*Pardosa amentata* (Clerck).

New Forest, Brockenhurst, June.

*Pardosa annulata* (Thorell).

Isle of Wight, Osborne (O. P.-C.).

*Pardosa pullata* (Clerck).

Southampton (O. P.-C.).

*Pardosa palustris* (Linnæus).

New Forest, Brockenhurst.

*Pardosa nigriceps* (Thorell).

Southampton (O. P.-C.) ; Boldrewood (F. W. F.).

*Pirata hygrophilus*, Thorell.

Parley Common (F. W. F.)

### AGALENIDÆ

Spiders with eight eyes, situated in two transverse rows. Legs with three tarsal claws. The species of this family spin a large sheet-like web and construct a tubular retreat at the back of it, which leads to some crevice amongst the rocks or the herbage, or the chinks in the walls of out-houses, wherever the various species may happen to be found. The posterior pair of spinners is usually much longer than the other two pairs.

*Agalena labyrinthica* (Clerck).

New Forest, Brockenhurst, June ; Isle of Wight, Osborne (O. P.-C.).

*Textrix denticulata* (Olivier).

Boldrewood (F. W. F.).

*Tegenaria atrica*, C. L. Koch.

Bournemouth ; Holdenhurst (F. W. F.), June.

*Tegenaria parietina* (Fourcroy).

Bournemouth (O. P.-C.).

*Tegenaria derhamii* (Scopoli).

New Forest, Brockenhurst.

*Tegenaria silvestris*, L. Koch.

Hampshire (O. P.-C.)

This species has been known hitherto as *T. campestris*, C. L. Koch, amongst English authors.

*Cælotus terrestris* (Wider).

New Forest, Brockenhurst, June.

This spider, closely allied to *C. atropos* (Walckenaer), a common spider in Cumberland, Lancashire and other parts of England, was added to the British list in June, 1894, when examples of both sexes were taken under pieces of wood and old palings strewn on the ground. It has not yet been taken in any other locality and is therefore, so far, peculiar to



## SPIDERS

Hampshire. The differences which distinguish this species from *C. atropos* cannot well be appreciated without figures of the structural differences.

### ARGIOPIDÆ

The spiders included in this family have eight eyes, situated in two rows, the lateral eyes of both rows being usually adjacent if not in actual contact, while the central eyes form a quadrangle. The tarsal-claws are three, often with other supernumerary claws. The web is either an orbicular snare, or consists of a sheet of webbing, beneath which the spiders hang and capture the prey as it falls upon the sheet.

*Meta merianæ* (Scopoli).

Boldrewood (F. W. F.)

*Meta segmentata* (Clerck).

Isle of Wight, Osborne (O. P.-C.).

*Tetragnatha extensa* (Linnæus).

Isle of Wight, Osborne (O. P.-C.) ; New Forest, Brockenhurst.

*Tetragnatha solandri* (Scopoli).

New Forest, Brockenhurst, June.

*Tetragnatha obtusa*, C. L. Koch.

New Forest, Brockenhurst, June.

This beautiful species, noticeable on account of the shorter and more gibbous form of the abdomen, does not frequent the margins of streams and ponds so exclusively as does *solandri*, but is usually beaten from the lichen-covered twigs of blackthorn, willow, fir, etc.

*Pachygnatha clerkii*, Sundevall.

New Forest, Brockenhurst, June.

*Pachygnatha degeerii*, Sundevall.

New Forest, Brockenhurst, June.

*Pachygnatha listeri*, Sundevall.

New Forest, Brockenhurst.

Of the three species of this interesting genus, remarkable for their structural similarity to the genus *Tetragnatha*, but differing from them in an entire absence of the orb-weaving habit, *listeri* is by far the rarest, though it occurs occasionally amongst dead leaves in the woods in several localities in the south of England.

*Cyclosa conica* (Pallas).

New Forest, Brockenhurst.

Many most beautiful varieties of this curious orb-web spinner occur in the New Forest ; though the species is not confined to this county by any means. The spider can readily be recognised from all other spinners of the wheel or orb web by the curious three-cornered shape of the abdomen. The web also usually has a narrow white, silken platform down the centre of the wheel, the spider sitting in the middle.

*Singa hamata* (Clerck).

New Forest, Lyndhurst (O. P.-C.).

## A HISTORY OF HAMPSHIRE

*Singa pygmæa* (Sundevall).

New Forest, Lyndhurst (O. P.-C.).

*Singa sanguinea*, C. L. Koch.

New Forest, Lyndhurst ; Southampton (O. P.-C.).

*Zilla* × *-notata* (Clerck).

New Forest, Brockenhurst ; Southampton (O. P.-C.) ; Isle of Wight, Osborne (O. P.-C.).

*Zilla atrica*, C. L. Koch.

New Forest, Brockenhurst.

*Araneus* (*Epeira*) *cucurbitinus*, Clerck.

New Forest, Brockenhurst ; Isle of Wight, Osborne (O. P.-C.).

*Araneus diodius*, Walckenaer.

New Forest, Brockenhurst ; Boldrewood (F. W. F.).

*Araneus alsine*, Walckenaer.

New Forest (O. P.-C. ; C. W.).

*Araneus diadematus*, Clerck.

New Forest, Brockenhurst ; Isle of Wight, Osborne ; Southampton (O. P.-C.).

*Araneus marmoreus*, Clerck.

var. *pyramidatus*, C. L. Koch.

New Forest, Brockenhurst (O. P.-C.).

This species is also known as *A. scalaris*.

*Araneus angulatus*, Clerck.

New Forest, Brockenhurst ; Ringwood (O. P.-C.).

This fine species is one of the largest of the orb-weaving spiders indigenous to Great Britain, and though taken in several different parts of England, it is by no means common. They are most abundant, so far as the New Forest is concerned, amongst the lichen-covered twigs of the blackthorn bushes which abound in the neighbourhood of Brockenhurst. When they fall into the umbrella from the branches, they bear a close resemblance to a fragment of detached gray lichen, and until they cautiously begin to move a leg, can scarcely be detected amongst the chips and leaves accompanying them in their fall. The large orb-web is spun up amongst the branches, and the spider itself lurks in some lichen-covered corner. They are often also beaten from fir and oak trees as well.

In a general way the species may be recognised by the conical prominence on each anterior shoulder of the abdomen. Another species, *A. gibbosus*, has however the same conical prominences on the abdomen, but it is much smaller.

*Araneus gibbosus*, Walckenaer.

New Forest, Brockenhurst ; Isle of Wight, Osborne (O. P.-C.).

This species is also known amongst English authors as *A. arbustorum*.

*Araneus triguttatus*, Fabricius.

New Forest, Brockenhurst.

This species is also known as *A. agalenus*.



## SPIDERS

*Araneus cornutus*, Clerck.

New Forest, Brockenhurst.

*Araneus quadratus*, Clerck.

Bournemouth.

*Araneus umbraticus*, Clerck.

New Forest, Brockenhurst.

*Araneus acalyphus*, Walckenaer.

New Forest, Brockenhurst.

*Araneus redii*, Scopoli.

New Forest, Brockenhurst.

Also known as *A. solers*.

*Theridiosoma argenteolum*, O. P.-Cambridge.

New Forest, Brockenhurst (O. P.-C.).

Both sexes, adult, of this beautiful though minute spider were taken amongst grass and water-weeds in half-dried ponds near Brockenhurst in June.

*Linyphia montana* (Clerck).

New Forest, Brockenhurst.

Also known under the name *L. marginata*, Blackwall.

*Linyphia furtiva*, O. P.-Cambridge.

Bournemouth, Branksome Woods, June.

*Linyphia pusilla*, Sundevall.

New Forest, Brockenhurst, June.

*Linyphia peltata*, Wider.

New Forest, Brockenhurst, June.

*Linyphia triangularis* (Clerck).

New Forest, Brockenhurst.

This species is also known as *L. montana*, Blackwall.

*Leptyphantes tenuis* (Blackwall).

Isle of Wight, Osborne.

Known also as *Linyphia tenuis*.

*Leptyphantes obscurus* (Blackwall).

New Forest, Brockenhurst, June.

*Bathypantes gracilis* (Blackwall).

Isle of Wight, Osborne (O. P.-C.); New Forest, Brockenhurst.

Known also as *Linyphia gracilis*, Blackwall.

*Floronia bucculenta* (Clerck).

New Forest, Brockenhurst (C. W.).

Known also as *Linyphia frenata*, Wider.

*Macrargus rufus* (Wider).

New Forest, Brockenhurst.

*Macrargus abnormis* (Blackwall).

New Forest, Brockenhurst.

## A HISTORY OF HAMPSHIRE

*Centromerus silvaticus* (Blackwall).

New Forest, Brockenhurst.

*Tmeticus graminicolus* (Sundevall).

Isle of Wight, Osborne (O. P.-C.).

*Erigone atra* (Blackwall).

Isle of Wight, Osborne (O. P.-C.).

*Gonatium rubens* (Blackwall).

New Forest, Brockenhurst.

*Gonatium isabellinum* (C. L. Koch).

New Forest, Brockenhurst.

*Trachygnatha dentata* (Wider).

Isle of Wight, Osborne (O. P.-C.).

*Gongylidiellum murcidum*, Simon.

New Forest (O. P.-C.).

*Tapinocyba subæqualis* (Westring).

Basingstoke (O. P.-C.).

This is the only recorded occurrence of this species in Great Britain, though it has occurred in Ireland and also in Sweden.

*Peponocranium ludicrum* (O. P.-C.).

Hampshire (O. P.-C.).

*Entelecara acuminata* (Wider).

New Forest, Lyndhurst (O. P.-C.) ; Brockenhurst.

### MIMETIDÆ

Spiders of this family are similar in general respects to the *Theridiidæ*, having eight eyes and three tarsal claws. The species of *Ero* construct a small brown pear-shaped or cylindrical egg-cocoon suspended on a fine silken stalk.

*Ero furcata* (Villers).

Isle of Wight, Osborne (O. P.-C.).

This spider is also known as *E. thoracica* and *Theridium variegatum*.

*Ero tuberculata* (De Geer).

New Forest, Ringwood and Brockenhurst (C. W.).

Until these examples were found in the New Forest, only two specimens had previously been recorded for Great Britain, namely, one from Wokingham (C. W. P.), and another from Bloxworth Heath.

### THERIDIIDÆ

The members of this family have eight eyes situated very much like those of the *Argiopidæ*, but the mandibles are usually weak, the maxillæ are inclined over the labium, and the posterior legs have a comb



## SPIDERS

of stiff curved spines beneath the tarsi. The web consists of a tangle of crossing lines, and the spider often constructs a tent-like retreat where the egg-sac is hung up.

*Theridium formosum* (Clerck).

Isle of Wight, Osborne (O. P.-C.) ; New Forest, Brockenhurst.

Not uncommon in the open woods amongst the young oak trees in the neighbourhood of Brockenhurst. The spiders spin an irregular tangled web close to the trunk, amongst the clusters of small twigs and shoots often growing on the stems of the trees. Hanging somewhere in the web can be found a small tent-like domicile made of fragments of dead leaves, lichen and other debris. Within it the spider remains crouched, dropping instantly to the ground if the tent-like retreat be handled or the web even touched. The female is about the size of a small pea, very gibbous, or humped on the upper side, orange or black with narrow white curving stripes running from the dorsal apex down the sides.

*Theridium riparium*, Blackwall.

Bournemouth, West Cliff, under ledges (O. P.-C.).

Though not quite so striking a species in point of colour as the former, this spider is much rarer, and constructs a still more curious and interesting tent-like, or rather tubuliform, retreat. The irregular web is not, however, spun on shrubs, but beneath some overhanging ledge on a bank or low cliff. The domicile is much longer, from an inch to two inches, and is more elaborately covered with small fragments of mould, sand, bark, bits of dry grass, etc., and somewhat resembles the case of a very large Caddis-worm. Though not peculiar to Hampshire, this spider has only been taken twice before, at Poole and in North Wales.

*Theridium sisypbium* (Clerck).

New Forest, Brockenhurst.

This species also makes a tent-like retreat, and is often very common on gorse bushes.

*Theridium denticulatum* (Walckenaer).

Isle of Wight, Osborne (O. P.-C.) ; New Forest, Brockenhurst.

*Theridium varians*, Hahn.

Isle of Wight, Osborne ; Southampton (O. P.-C.) ; New Forest, Brockenhurst.

*Theridium tinctum*, Walckenaer.

New Forest, Brockenhurst.

*Theridium simile*, C. L. Koch.

Isle of Wight, Osborne (O. P.-C.).

*Theridium aulicum*, C. L. Koch.

Winchester (O. P.-C.).

This species is also known under the name *T. rufolineatum*.

*Theridium vittatum*, C. L. Koch.

New Forest, Brockenhurst.

This spider is known also under the name *T. pulchellum*.

## A HISTORY OF HAMPSHIRE

*Theridium bimaculatum* (Linnæus).

Isle of Wight, Osborne (O. P.-C.).

This species is known also under the name *T. carolinum*.

*Theridium pallens*, Blackwall.

New Forest, Brockenhurst.

*Theridium lineatum* (Clerck).

Isle of Wight, Osborne (O. P.-C.) ; New Forest, Brockenhurst.

A very common species. The female lives in the folded leaf of a bramble, or that of some other shrub, spinning the edges together. Within this domicile she constructs a round sea-green egg-sac about as large as a very small pea. The spider has a pale yellow abdomen with a broad pink central dorsal band or two pink bands, one on each side. Another variety has no pink bands, but a row of black spots on each side. The male and female can also be found together within their leafy domicile.

This spider is also known under the name *Phyllonethis lineata*.

*Teutana grossa* (C. L. Koch).

Winchester (Blackwall).

For many years this was the only example of this species which had been recorded for Great Britain. More recently it has occurred in a cellar in Bristol and also in the Channel Islands. It is common on the Continent. The abdomen is black, with a pale band round its anterior margin, and a double row of white spots on the dorsal surface.

This spider is also known under the name *Theridium versutum*.

*Steatoda bipunctata* (Linnæus).

New Forest, Brockenhurst.

This globular little spider, often found plentifully in the angles of stable and other outhouse windows, must not be mistaken for the last-named species.

It is also known under the name *Theridium quadripunctatum*.

*Dipæna melanogaster* (C. L. Koch).

New Forest, Lyndhurst (O. P.-C.), July.

A very rare species recorded from only one other locality in Great Britain. It apparently frequents furze bushes in the heath districts.

*Pedanostethus lividus* (Blackwall).

New Forest, Brockenhurst.

### ERESIDÆ

The spiders of this interesting family have eight eyes situated in two groups of four each, the outer four forming a large quadrangle, and the inner four a very small one, close to the anterior margin of the carapace. The tarsal claws are three in number, while the calamistrum and cribellum are present.



## SPIDERS

### *Eresus cinnabarinus* (Olivier).

Ringwood, Parley Heath (J. C. Dale); Bournemouth (D. Sharp); between Bournemouth and Poole (Macrae), May and June.

This rare, and in the male sex beautiful, species, has been taken on only three occasions in Great Britain of which any authentic record exists. Until the late J. C. Dale, the entomologist, captured two adult males on the boundary line between Dorset and Hampshire no example had been taken in this country. It is true that Dr. Leach includes it as a British species in the supplement to the *Encyclopædia Britannica*, edition 4, 5 and 6; but, if it was taken, the specimen apparently no longer exists. A third adult male was taken near Bournemouth by D. Sharp, Esq., and is now in the collection of the British Museum, while an adult female was taken on the sand hills between Bournemouth and Poole by Mr. Macrae as recently as 1891. The latter specimen, as well as one of the adult males taken by Mr. Dale, are now in the collection of the Rev. O. Pickard-Cambridge; the other male is in the collection of C. W. Dale, Esq., of Glanville's Wooton, Dorset.

The male is remarkable for its jet black colour and crimson markings. A narrow basal marginal band on the carapace is crimson, and the legs are annulated with white and dull red. The dorsal area of the abdomen is bright scarlet with four or six black spots, the two anterior pairs forming a large quadrangle. The ventral surface is black, with a white spot just before the spinners, the integument of the lung-books being clothed with red hairs.

The female is almost entirely black, with narrow white annulations on the legs.

The habits of several foreign species belonging to this family, but falling under another genus, are very similar to those of the family *Dictynidæ* of our own country, spinning a nest, amongst the heads of rushes and other herbage, of white silk, with many tubular retreats, in which the members of the colony dwell. The species of the genus *Eresus*, however, conceal themselves under stones or in burrows, in dry, sandy places. The possession of the calamistrum, or comb of bristles on the protarsi of the fourth pair of legs, and the cribellum, or anterior pair of spinning organs, brings this family and that of the *Dictynidæ* together in a group, separated from the other *Arachnomorphæ*.

## DICTYNIDÆ

The species resemble the *Eresidæ* so far, in the possession of the calamistrum and cribellum and three tarsal claws, but the eyes, eight in number, are situated in two transverse rows, the laterals being in contact. They construct a tubular retreat with an outer sheet of webbing, which is covered with a flocculent silk made with the calamistrum and threads from the cribellum.

### *Amaurobius similis* (Blackwall).

Southampton (O. P.-C.); New Forest, Brockenhurst.

## A HISTORY OF HAMPSHIRE

*Amaurobius fenestralis* (Stroem).

New Forest, Brockenhurst.

*Dictyna arundinacea* (Linnæus).

New Forest, Brockenhurst.

*Dictyna uncinata*, Thorell.

Isle of Wight, Osborne (O. P.-C.).

*Dictyna pusilla*, Thorell.

New Forest, Lyndhurst (O. P.-C.).

*Dictyna latens* (Fabricius).

New Forest, Brockenhurst (O. P.-C.).

*Dictyna flavescens* (Walckenaer).

Isle of Wight, Osborne (O. P.-C.) ; New Forest, Lyndhurst (O. P.-C. ; C. W.).

Known also under the names *pallens*, Blackwall, and *variabilis*, C. L. Koch.

*Protadia subnigra* (O. P.-C.).

Winchester (O. P.-C.).

### ULOBORIDÆ

The species of this family are remarkable also for the possession of the calamistrum and cribellum, but many of the spiders construct an orbicular web similar to that of members of the *Argiopidæ*. They are very rare in England, being mostly denizens of the tropics.

*Uloborus walkenaerius*, Latreille.

New Forest, Lyndhurst Heath (C. W.).

A very rare spider in this country, obtained by sweeping heather with a net ; but not more than half a dozen specimens have been taken hitherto. The species spins an orbicular snare, which in the case of some tropical forms are hung in the webs of the giant *Nephilæ*, also an orb-weaving species. Known also as *Valeda lineata*, Blackwall.

*Hyptiotes paradoxus* (C. L. Koch).

New Forest, Brockenhurst, June or September.

Another very rare spider, hitherto taken once only in Great Britain, in Cumberland. Recently, however, Mr. Warburton has discovered it in plenty in the New Forest. Though comparatively a small spider, it is of great interest on account of its extraordinary habits. Most of the orb-web spinners having constructed their net retire into a hiding-place having a line leading from the centre of the web to the retreat. This line they hold with the claws of a fore leg, and thus receive instant notice of any insect touching the web and viscid lines. Directly this occurs the line is often jerked several times to encourage the entanglement of the insect, and the spider hastens to ascertain the nature of its capture. *Hyptiotes*, however, derives an even more refined amusement from the daily task of providing itself with food. In this case the web is simply an isosceles triangle with cross-lines between the legs and the



## SPIDERS

central radius, the legs being continued further than the base and fastened to some twig. From the apex of the triangle, which lies horizontally, a line is attached and held in the claws of the two first pairs of legs of the spider, being also attached to a twig a short distance behind the spider and held in the claws of the two hind pairs of legs. This trap-line, as it is called, is gathered in a coil close to the spinners, and held fast while the web is strained tight. Directly an insect touches the net, Hyptiotes lets go the slack, the net springs back and naturally falls, more or less loosely, on the struggling insect, while the spider is dragged forwards by the spring of the net, while still holding on tight to the trap-line with its fore claws. Sometimes the slack is drawn in again and the net again sprung to make sure of a capture. I have observed cases in which the trap-line is not continuous, but broken off, and the hinder portion of it in this case proceeds directly from the spinners. The web has also often more than one central radius, but beyond slight differences such as these the mode of operation is the same in all cases which have come under my notice.

These interesting spiders are to be found amongst the dry lichen-covered twigs of the old blackthorn bushes in the neighbourhood of Brockenhurst.

## CHERNETES

### CHELIFERIDÆ

Out of twenty species of false scorpions hitherto recorded as indigenous to Great Britain only two have been taken in this county. That this small number is simply due to lack of investigation may be gathered from the fact that fourteen species of the order have been taken in the neighbouring county of Dorset. The various species can usually be found amongst moss and dead leaves or beneath stones and the bark of trees. They are unmistakable on account of their possession of a pair of forcipated palpi, like those of the true scorpion. These are usually extended wide open, when the Arachnid is alarmed while it hastens backwards to take shelter. In spite of this scorpion-like appearance these little creatures are much more nearly allied to the mites or Acaridea. The two species which have occurred in this county are the following :—

*Chernes cimicoides* (Fabricius).

New Forest (W. F. Blandford ; O. P.-C.).

*Chernes phaleratus*, Simon.

New Forest (W. F. Blandford ; O. P.-C.).

## OPILIONES

The harvestmen are spider-like creatures with eight long legs, the tarsi long and very flexible. Eyes simple, two in number, situated on each side of an eye eminence. Body not divided into two distinct

## A HISTORY OF HAMPSHIRE

regions by a narrow pedicle, as in spiders. Abdomen segmentate ; breathing apparatus consisting of tracheal tubes connected with external stigmata beneath.

### PHALANGIIDÆ

*Platybunus triangularis* (Herbst.).

Isle of Wight, Ventnor (O.P.-C.).

*Oligolophus agrestis* (Meade).

New Forest, Brockenhurst.

*Oligolophus spinosus* (Bosc).

Hursley (O. P.-C.).

*Liobunum rotundum* (Latreille).

New Forest, Brockenhurst.

*Megabunus insignis*, Meade.

Bournemouth.

### NEMASTOMIDÆ

*Nemastoma lugubre* (Müller).

New Forest, Brockenhurst.

### TROGULIDÆ

*Anelasmacephalus cambridgii* (Westwood).

Isle of Wight, Ventnor (O. P.-C.).

Out of twenty-four species of harvestmen recorded from Great Britain, seven only have been taken in this county, while twenty-one species have been taken in the neighbouring county of Dorset. That the greater part of these species, and possibly many more besides, would be found on close research cannot be doubted.



# CRUSTACEANS

The indifference to the subject of Crustacea which long prevailed is illustrated by the disappointing circumstance that there is almost no allusion to it where most it might have been hoped for and expected, namely, in that early and supremely valued text-book of Hampshire science, *The Natural History of Selborne*. Gilbert White, student as he was of Scopoli and correspondent of Pennant, never mentions a crustacean except to explain the name 'side-fly,' given to a parasitic insect, 'from its running sideways like a crab,' and to state the seasonal time of appearance of a woodlouse. Even Thomas Bell, author of various considerable works on crustaceans, recent and fossil, who dates the preface to his *British Stalk-eyed Crustacea* from Selborne, Hants, July, 1853, and who lived in what had once been Gilbert White's house, tells us scarcely anything specially about the existing crustacea of his own neighbourhood.

This county<sup>1</sup> has all the requisites for a varied and extensive carcinological fauna. It has woods and gardens, wells and ponds, rivers and river mouths, rivulets with fish in them, a sea supplying sheltered inlets and shallows, with neighbouring deeps, and an extremely diversified margin or shore-line. Besides all this, it is visited by ships from every part of the world. Strange as it may seem in regard to some of them, all these points can be shown to have a bearing on our subject. The prolific and pertinacious animals with which we are now concerned, cunning to hide and bold to explore, will certainly not have neglected to take advantage of every one of them. They will surely have used them one by one for assuming their own dominion over what we in our vanity call an English county, and for colonizing it with an almost incredible number of their own species. For, not here alone but everywhere, they voyage as stowaways, they enter countries without a passport, they become naturalized without ceremony, they eat fruit without payment, they fish in the close season, they ignore the three-mile limit of territorial waters. Man is apt to look upon them as designed only for

<sup>1</sup> Within the limits of the nineteenth century there have been a great number of naturalists who have successfully studied English crustacea. Colonel Montagu, Dr. William Elford Leach, and Jonathan Couch, Adam White and Philip Henry Gosse, Dr. Baird and C. Spence Bate, G. S. Brady, David Robertson, and A. M. Norman, are a few out of a crowd of eminent names. These investigators have among them, and sometimes single-handed, devoted to the pursuit the arts of the detective, the skill of the draughtsman, descriptive accuracy, vivacity and charm in literary composition, and that self-denying enthusiasm which is needed for dredging at sea and for leaving no stone unturned on land. But though they have ranged east and west, north and south, their particular fields of research have for the most part lain elsewhere than here, and Hampshire has been left as a truly promising region to reward the labours of some rising carcinologist.

## A HISTORY OF HAMPSHIRE

his advantage, and in truth they render him inestimable service as scavengers, and make indirectly, far more than directly, an enormous contribution to his food supply. But they in turn have no sort of respect for his supercilious airs of superiority, and make free use of his works for their own purposes, as though he were designed for their benefit, not they for his.

The species of crustacea which are known to occur in the lands and waters immediately adjoining, or at no great distance from those of Hampshire on either side, and which might by reasonable inference be attributed to that county itself, would form a catalogue of considerable length. But within its own actual records the county possesses so much of peculiar interest that there is no temptation to rely upon what is merely inferential, or even to include those forms which are stated and well known to occur along the whole south coast of our island.

To make the subject more intelligible to those who are not specialists, it may be well to explain a few things in regard to which the inadequacy of language might easily perplex the reader. Crustacea are so called from the crust or hardened shell, with which we are familiar in the common eatable crab. But crustacea are not all crustaceous. They may in parasitic forms degenerate into soft worm-like oddities, without the jointed limbs, the possession of which is their proper title to rank, with spiders, insects and centipedes, among the Arthropoda. They are essentially aquatic, yet many of them have invaded the land, and some have learned to content themselves with a minimum of moisture in the air they breathe. There are three great divisions, known as Malacostraca, Entomostraca, and Thyrostraca, by interpretation soft shells, insect-shells, door-shells. But in natural history one has constantly to bear in mind that it does not much signify what a name by its derivation happens to signify. Its original meaning often has a value which is purely historical and not scientific, leading us back to some superseded classification or exploded set of opinions. The Malacostraca include crustaceans which have their shelly covering hard and thick, along with others in which the coat is so soft and thin as scarcely to deserve the name of shell. The crab-like, lobster-like, and shrimp-like forms are all malacostracan. So also are the hermit-crabs. So also are forms like the woodlouse and the sandhopper—multitudinous species. And there are others beside, which cannot be likened to any of the forms mentioned, though they belong to the same principal division. This also may be noticed, that all those crustaceans which are commonly known because they are commonly eaten, are malacostracan. Moreover, these all have pedunculate eyes, organs of vision placed on movable stalks, whereas the woodlice and sandhoppers, which are equally malacostracan, have sessile eyes, as in insects, movable only with the head, not capable of being independently lifted and lowered, turned this way and that, after the fashion displayed by many an artful crab.

Within the stalk-eyed group there occurs a tolerably obvious line of cleavage, separating the crabs from the lobsters and shrimps, that is



## CRUSTACEANS

to say, the Brachyura, or short-tails, from the Macrura, or long-tails. Among the crabs we have three species to be specially noticed here. Of these the first two belong to the company of Cyclometopa, or arch-fronted crabs, a company which also includes the widely distributed *Cancer pagurus*, familiar at table, and the still commoner *Carcinus mænas*, the shore-crab, the generic name of which will be recognised as forming one of the roots of carcinology.

*Pilumnus hirtellus* (Linn.<sup>1</sup>), the bristly crab, has been described by Linnæus, Pennant, Leach and others. Linnæus carries the knowledge of it back to Rondeletius and Gesner. Bell specifies its occurrence in Hampshire.<sup>2</sup> He had obtained it only from deep water, in which from other sources we learn that it descends to thirty-five fathoms. Leach, who states that it is also procurable between tide-marks, in 1813 thus describes it: 'Body and legs hairy; the shell with five dents on each side; claws somewhat muricated on the outside.' He adds that it inhabits the European ocean, and that 'in England it is esteemed a great rarity, having only been found hitherto on the coasts of Devonshire.'<sup>3</sup> Muricated is rather a favourite epithet with the older naturalists. It is now almost obsolete. Anything armed with sharp points, like the shell of the murex, was said to be muricated, and this is a character sometimes highly developed in crustaceans. It is not a very striking feature in the bristly crab, and applies more to the smaller than to the larger claw, or cheliped. Surprise is often expressed at the want of symmetry in this pair of crustacean appendages. The explanation is not really far to seek. Man is able to adopt artificial implements to his various purposes, and finds it much more convenient to help himself at dinner with a knife and fork than with two knives or two forks. Crabs and lobsters, which have to grow their tools instead of manufacturing them, develop a useful diversity for various ends. They find it to their advantage, for example, to have one pincer for cutting and another for pulling or pounding, one long, for grasping the prey, another short, for conveying it to the mouth, and so on, according to the special conditions of existence. Leach speaks of 'five dents on each side.' It would have been more to the purpose if he had described the front of the carapace, which is formed by two finely denticulated lobes, each flanked by a tooth adjacent to the orbit, of which the upper margin is smooth, but the lower dentate and fissured. On the outer side of each orbit are the five 'dents,' that is, dentes, or teeth, which occur in a great number of crabs. The distinguished American carcinologist, J. D. Dana, speaks indeed of these marginal teeth as normally five, though by subdivision or obsolescence the number may be increased or diminished. He uses the letters or the word 'dents' to designate the several teeth, assigning the initial letter to the tooth which is nearest the eye, and sometimes so near that

<sup>1</sup> An author's name appended in parenthesis is accepted as an intimation that he gave the species its specific but not its generic name.

<sup>2</sup> *British Stalk-eyed Crustacea*, p. 70.

<sup>3</sup> Art. 'Crustaceology,' *Edinburgh Encyclopædia*, vol. vii. p. 391.

## A HISTORY OF HAMPSHIRE

it seems to form part of the orbit itself. Of the service which the hairs or bristles on its carapace and legs may render to *Pilumnus birtellus*, by enabling it to gather about it extraneous objects, some idea may be formed from the discussion which will follow more conveniently under another heading. The carapace of this species seldom exceeds an inch in breadth, and its length is less. The latter measurement, however, does not include the little tail-piece, or pleon, closely folded under the body, and having in this genus all its seven segments distinct in both sexes.

*Pirimela denticulata* (Montagu) in English specimens is smaller than the preceding species, though in the Mediterranean it grows to be as large or larger. In the male its tail-piece has only five distinct segments, the three middle ones being coalesced into a single piece. While the species of *Pilumnus* number about fourscore, the genus *Pirimela* has to be contented with a solitary representative. This single species has been taken at Compton, in the Isle of Wight, washed ashore, and Bell<sup>1</sup> was led to suppose that it was not to be found alive between tide marks; but I am able to guarantee its occurrence in such situations, and Adam White<sup>2</sup> quotes Norman's authority for its being not uncommon among weed at extreme low water in the Channel Islands. It was unmistakably figured by Colonel Montagu as early as 1805.<sup>3</sup> The chelipeds are much smaller than in the preceding species, the five lateral dents of the carapace are less acute, and the back, instead of being smooth in surface but bristling with hairs, is devoid of hairs, but diversified with bosses. The front is strongly produced and tridentate, the central tooth being the largest and the most prominent.

Our third crab is commonly known as *Pisa tetraodon* (Pennant), but in accordance with rule should rather be called *Blastus tetraodon*. This 'four-horned spider-crab' is reported by Leach<sup>4</sup> from the Isle of Wight, whence also I have myself received it. It is a representative of a highly important company, the Oxyrrhyncha. In this 'sharp-snouted' set, the sharpness of the beak, to which the name refers, may be taken as an emblem of the sharpness of wits which these ingenious animals display. As usual in this company, the carapace forms a sort of triangle, of which the rostral projection is at the apex. In this instance the strongly produced beak is bifid, the two horns lying close together for some distance, but for at least the apical third of their length becoming greatly divergent. On each side to the rear of this double beak is a strong tooth, thus completing the sum of four horns mentioned in the trivial name. Beside these there are several lateral or sublateral teeth on the carapace, and tubercles on the chelipeds. On the fingers of the four pairs of walking legs there are little delicate combs fringing the concave margin. But that which has excited the most lively interest in this crab and its kindred is the armature of peculiarly-shaped hairs which will be found dotted about, not only on the surface of the carapace and on its horns

<sup>1</sup> *British Stalk-eyed Crustacea*, p. 74.

<sup>2</sup> *Popular History of British Crustacea*, p. 40.

<sup>3</sup> *Trans. Linn. Soc.*, London, vol. ix. p. 87, pl. 2, fig. 2.

<sup>4</sup> *Malacostraca Podophthalmata Britannicæ*, No. 13, pl. 20, 1817.



## CRUSTACEANS

and teeth, but also on the limbs, and even on the slender antennæ. By help of this apparatus the creatures invest themselves with a submarine botanical garden, and, what may seem almost more wonderful, a zoological garden also. They so identify themselves with their environment, that they have the fauna and flora among which they reside growing on their own backs. To make sure that it shall do so, they put it there. Nor are they liable to be enslaved by these colonists of their own choosing, because, like crustaceans in general, they periodically change their coats, and when the old skin is shed the old overgrowth must go with it. But it has been proved by experiment<sup>1</sup> that they are not reduced to wait for the time of exuviation. The dress which they put on, they can also take off, and there is a nice adaptation between the length of their claws and the parts of the body demanding attention. The purpose of the disguise is no doubt aggressive and defensive in one. With a fakir-like disregard for good looks, they become in appearance a mere ragged mass of polyps and seaweeds. Naturally this is untempting to the crab-eating fish, but forms an insidious snare by which small game may be tempted to fly for refuge into the very arms and jaws of the devouring crab.

We pass on to the Macrura, which present the paradox of being remarkably like and remarkably unlike the Brachyura. When the appendages of crab and lobster—their eyes and antennæ, jaws and claws and legs, fourteen pairs in all—are compared seriatim, the agreement is extremely striking. In the remainder of the structure, though the agreement is not to be forgotten, it is the unlikeness that appeals to the eye. Of the Macrura the county possesses a very familiar representative in the common prawn, *Leander serratus* (Pennant). According to Bell<sup>2</sup> the prawns of this species ‘are chiefly obtained for the London markets off the Isle of Wight and Hampshire coast.’ The graceful movements and pellucid beauty of the animal when alive and in its own element have been celebrated by Mr. Gosse, who has also explained the mechanism by which the prawn, unlike the purposely untidy spider-crab, scrupulously cleanses every part of his shining coat and limbs and long antennæ. It should be noticed that of the five pairs of legs the last three have simple fingers, while the first two pairs are chelipeds, that is to say, the hand is drawn out into an opposable thumb. Of the chelipeds, the first pair are here the smaller, and carry tufts of hair to brush with.

In contrast with the preceding, which is one of the commonest and best known English crustaceans, must now be mentioned one of the rarest. This is *Squilla desmarestii* (Risso), of which Bell<sup>3</sup> was informed by Mr. A. G. More, of Bembridge, Isle of Wight, that it had been taken repeatedly off Bembridge, by the fishermen of that place, on a muddy bottom grown over with grass, thereby meaning *Zostera marina*, the sea-grass. That rare species should be common with fishermen is to the

<sup>1</sup> Graeffe, *Bolletino della Soc. adriat. Sci. Nat. in Trieste*, vol. viii. fasc. 1, 1882, and C. W. S. Aurivillius, *Kongl. svenska Vetenskaps-Akademiens Handlingar*, vol. xxxiii., No. 4.

<sup>2</sup> *British Stalk-eyed Crustacea*, p. 304.

<sup>3</sup> *Ibid.*, p. 356.

## A HISTORY OF HAMPSHIRE

naturalist a well known contrariety. Fisher-folk are as seldom naturalists as philosophers are kings.

The Squillidæ are emphatically long-tailed crustaceans, though they are not grouped with the Macrura, but form a separate division called the Stomatopoda, or mouth-feet. Such a name cannot help sounding very oddly to those who have not studied the general organization of crustaceans. It requires a little experience to understand the versatility of their appendages. In the Brachyura and Macrura we have had to do with a pair of eyes, two pairs of antennæ, six pairs of variously-shaped jaws or mouth-organs, and five pairs of trunk-legs capable of modification for grasping, walking, swimming, and some other purposes. To these follow six pairs pertaining to the tail-part, or pleon ; but of them the presence or full complement is far less regular in its development. In the Squillidæ there are stalked eyes, as in the preceding groups, but with this additional peculiarity, that the stalks are articulated on a segment which is itself movably articulated, not, as elsewhere, consolidated with the following segments of the trunk. Then come two pairs of antennæ and four pairs of jaws, according to rule. But at this point a strange difference is brought into view. In place of the fifth pair of jaws we are confronted with a truly formidable pair of legs. One has to imagine a carving-knife and fork combined, with a clasping action, and capable of being suddenly projected, abruptly opening and then closing with a strong spring, so as to dig the prongs well into the object of assault. As subsidiary to the human teeth, such an implement might perhaps be called a mouth-organ, and, if so, it will be well fitted to convey some idea of the mouth-feet of many Stomatopoda. These raptorial claws are succeeded by three much smaller pairs of legs or mouth-feet of a different pattern, different from the first pair but like one another. The resemblance of successive limbs is nothing wonderful. It is frequently met with. But this deserves attention, that the three pairs so much alike in the squilla correspond respectively to three pairs so much unlike in the lobster as its outer maxillipeds, its great claws, and the slender, minutely chelate first pair of walking-legs. In each case the appendages are followed by three pairs of legs, used in perambulation, but in the squilla these, and the pair of limbs in front of them, are attached to segments of the body that are articulated instead of being coalesced. Moreover, they are not covered by the carapace, so that to eyes accustomed to the extent of that covering in the preceding groups, the squilla seems to have its jacket not quite long enough. But to all these differences must be added another of still greater importance, in the structure of the preponderant tail-part. For not only do we find this furnished on the under side with a series of powerful swimming feet, but we find these swimming feet furnished with curiously tufted breathing organs. In all the crustaceans we have been previously considering the gills, or branchiæ, have been attached to the appendages of the trunk, and have been concealed and protected beneath the carapace on either side, with arrangements by which the water required for



## CRUSTACEANS

respiration is introduced and again expelled. But in our squilla the branchiæ are attached to appendages of the pleon, not to those of the trunk, and are freely exposed in the water, to which the vigorous movements of the swimming feet will give the requisite circulation. Thus the squilla obtains an equivalent for the current of fresh air which gives life and health to human lungs.

From this fierce and predatory tribe, of very limited numbers, we pass on to the sessile-eyed Isopoda, which are extremely numerous, usually small in size, seldom showing anything like heroic ferocity, but, for all that, capable of mischief, and cruelly fond of fish.

*Limnoria lignorum* (J. Rathke) appears not to have been scientifically described or named till 1799. That the English name for it, the gribble, is not to be found in an edition of Johnson's Dictionary issued in that very year is not surprising, since at least as late as the year 1880 it had not found its way into Webster. Bate and Westwood<sup>1</sup> in 1867 declare that it is 'one of the most destructive creatures to be found amongst the whole of the articulated animals, burrowing into the wood of marine erections, such as piers, piles, and other works of public utility.' They say further, 'We have been indebted to Mr. H. Pownall for specimens of the injured timber, and individuals from the Southampton Water, extending to woodworks a mile up the Itchen river.'<sup>2</sup> This little pest is innocent enough in appearance, pale in colour, slow in movement, oval in shape, and a fifth of an inch long at the maximum. It cannot be claimed as specially the pride of Hampshire, since to the naturalists of Great Britain the first notice of it came from Scotland. Dr. Leach says: 'This new and highly interesting species I received through the politeness of my attentive and worthy friend, R. Stephenson, Esq.'<sup>3</sup> It occurs in the greatest abundance at the Bell Rock, in the old woodwork used whilst the lighthouse was building, which it perforates in the most alarming manner, entering to the depth of two inches or more, boring in every direction.'<sup>4</sup> But it does not confine its depredations to old woodwork, and undoubtedly on none of our coasts can timber between tidemarks, without special protection, be considered safe from its attacks. That it has no particular spite against the English county of Hants is clear, since we learn that it has impartially carried its ravages to the navy yard at Portsmouth, New Hampshire, in the United States of America.<sup>5</sup>

So far as concerns the meaning of the name Isopoda, the equal-footed, the gribble is a satisfactory representative of the group, because its seven pairs of trunk-legs are all nearly equal and alike. But there are many isopods in which the legs are far from being all alike or all equal. It is important to remember that the crabs and lobsters and their near relations have six pairs of jaws and five pairs of legs, but that the Isopoda,

<sup>1</sup> *History of British Sessile-eyed Crustacea*, vol. ii. p. 352.

<sup>2</sup> *Ibid.*, vol. ii. p. 356.

<sup>3</sup> Better known as Robert Stevenson.

<sup>4</sup> *Trans. Linn. Soc.*, London, vol. ix. p. 371, 1815.

<sup>5</sup> A. E. Verrill, *Invertebrate Animals of Vineyard Sound and Adjacent Waters*, p. 86, 1874.

## A HISTORY OF HAMPSHIRE

like the Squillidæ, have four pairs of jaws and seven pairs of legs. Hence the first two pairs of legs in a gribble answer to the last two pairs of jaws in a lobster or shrimp. In another important point the Isopoda agree with the Squillidæ. Their breathing apparatus, at least in the genuine isopods, is in the pleon or tail-part, the branchiæ having their place in the series of pleopods or swimming feet. But the tail-part to which these feet are attached is proportionately far smaller than in the Squillidæ; and the carapace, which in the Brachyura and Macrura reaches over all the limbs of the trunk, and in the Stomatopoda over all but the last three pairs, here leaves all seven pairs uncovered, each pair normally attached to a movably articulated segment.

In addition to the salt-water gribble, the recorded isopods of Hants comprise some that live on land. Of these it will be proper to forbear speaking at any great length here, reserving a fuller discussion of them for the inland counties, which have otherwise an exceedingly limited supply of Malacostraca. The terrestrial isopods, though known by the undignified name of woodlice, are true crustaceans. Hampshire may or may not possess all the twenty species known to occur in England. Its record has four of them: the rather uncommon *Porcellio dilatatus* (Brandt), which I have taken at Ventnor; *Platyarthrus Hoffmannseggii* (Brandt), which I have taken also at Ventnor, from its usual place of abode, an ants' nest; *Philoscia muscorum* (Scopoli), the Moss Slater, a very common species, of which Bate and Westwood<sup>1</sup> say, 'Professor Bell found it under stones at Cheriton, and observes in his manuscript notes, "I found it of every shade of colour, from rich black to reddish brown and light green. It is more active than any other species, and the crust is more tender and easily injured"''; lastly, *Oniscus asellus* (Linn.), the Land Slater, another extremely common species, for which Gilbert White gives, as the earliest and latest times of first appearance observed at Selborne, the dates February 23rd, April 1st. Professor Bell's comparative notes on *Philoscia muscorum* must be read now with reserve, on the ground that he could not have been acquainted with all the species of English woodlice at present known.

One more group of Malacostraca remains to be mentioned. These are the Amphipoda, or spreading-feet, as Latreille was pleased to call them. Like the isopods they are sessile-eyed, and like the isopods they have seven pairs of legs on movable segments of the trunk, not covered by the carapace. Their name refers to the circumstance that their legs are found in many postures, diverging backwards, forwards, sideways, and sometimes upward as well as downward. From almost all other Malacostraca they are strikingly distinguished by having sack-like unenclosed branchiæ attached to the last six pairs of trunk-legs or to some of them, and by the structure of the tail-part, in which normally the first three, and never more than the first three, pairs of appendages are swimming feet.

A very anomalous member of this group, *Chelura terebrans* (Philippi), is recorded from Southampton Water.<sup>2</sup> The fact is that wherever the

<sup>1</sup> *British Sessile-eyed Crustacea*, vol. ii. p. 451.

<sup>2</sup> *Ibid.*, vol. i. p. 507.



## CRUSTACEANS

gribble occurs, there also will the chelura be found, burrowing in the same sea-soaked timber, which it uses for food as well as lodging. It belongs to a family which ranges very extensively about the world, but of which, nevertheless, at present only a single genus and only a single species is known. A much more normal representative of the Amphipoda is a species recorded with doubt from the Isle of Wight, but certain to occur there, known recently as *Amathilla homari* (Fabricius).<sup>1</sup> When well-grown, this species has the back strongly ridged or carinate. But the carina or keel is scarcely noticeable in young specimens, which were therefore placed by Mr. Spence Bate<sup>2</sup> in a separate genus *Grayia*, and as this name has priority over *Amathilla*, the species should rightly be called *Grayia homari*.

That however which gives Hampshire a distinctive interest in the Amphipoda, is not the possession of this and a hundred other widely distributed marine species. Much rather may attention be concentrated on the freshwater forms which its wells have yielded. Bate and Westwood have recorded *Niphargus fontanus*, Bate, as taken by the Rev. A. R. Hogan from a pump-well at Ringwood,<sup>3</sup> and *Niphargus kochianus*, Bate, as taken by the same observer both in association with the preceding species at Ringwood, and unmixed with any other species in a well but recently dug at Upper Clatford, near Andover.<sup>4</sup> I have myself received *Niphargus aquilex*, Schiödte, from the Isle of Wight. *Crangonyx subterraneus*, Bate, was obtained, and this also by Mr. Hogan, at Ringwood.<sup>5</sup> All these are pallid, delicate little crustaceans, with the eyes feebly developed or even wanting. The species are distinguished principally by the forms of the first two pairs of legs, known technically as the first and second gnathopods. The name *Niphargus*, snow-white, alludes to the pale hue which these tenants of the darkness have acquired. In this genus the terminal pair of tail-feet exhibit a very unusual elongation, especially in the male sex. The tale of wells harbouring shrimps is often a surprise, even to the owners, and there is sometimes an inclination to disown these harmless companions, as though they were a reproach, whereas they are rather a guarantee for the wholesomeness of the well-water in which they are found. Not unnaturally the question is often asked how a great many wells distant one from another come to be peopled by such tenants. It can scarcely be doubted that they are the slightly modified descendants of ancestors like the common *Gammarus pulex* (Linn.), which throngs our rivulets everywhere. It is easy also to conceive that the subterranean water-courses which distribute water

<sup>1</sup> *British Sessile-eyed Crustacea*, vol. i. p. 365, with reference to White, *List of British Animals in the British Museum*, 'Crustacea,' p. 49. White's account of the specimen is *Cancer carino-spinosus*, Turton; *Mont. Linn. Trans.*, xi. p. 4 (?) a. Isle of Wight? Old 'Collection.' The reference to Montagu will be found in the second, not the eleventh, volume of the *Linnean Transactions*, and, according to Bate and Westwood (*op. cit.*, p. 363), the reference to Turton is a mistake.

<sup>2</sup> *Catalogue of Amphipodous Crustacea in the British Museum*, p. 101, 1862.

<sup>3</sup> *British Sessile-eyed Crustacea*, vol. i. p. 320.

<sup>4</sup> *Ibid.*, vol. i. p. 324.

<sup>5</sup> *Ibid.*, p. 328.

## A HISTORY OF HAMPSHIRE

to the wells may distribute the well-shrimps at various stages of their existence along with the water.

However wide apart the different groups of Malacostraca may appear to stand, the Entomostraca display still greater diversity of organization. With their numerous species and their innumerable individuals they occupy all waters, salt or fresh, deep or shallow, stagnant or rapidly flowing, icy cold or tropically warm. That Hampshire in its various waters possesses the usual profusion of species may be taken for granted. But more interesting perhaps than those which it has are one or two which it seemingly has ceased to have. The first of these is *Apus cancriformis*, Schæffer, the Shield Shrimp, which Adam White<sup>1</sup> records from 'Hampshire (Christchurch). From the collection of Dr. Leach.' Leach himself,<sup>2</sup> describing it as a new species, *Apus montagui*, says: 'Inhabits England, near Christchurch in Hampshire, where it was discovered by Montagu, who sent it to Dr. Leach as the Linnean *Monoculus apus*.' The determination by Colonel Montagu was subsequently accepted as correct, though the Linnean name had to give way to Schæffer's. *Apus* is a genus of the Phyllopoda or leaf-footed Entomostraca, which differ from other crustaceans by having the body composed of an indefinite number of segments, and by having in the family Apodidæ more than one pair of appendages to a segment. When Johann Leonhard Frisch in his *Insects in Germany*,<sup>3</sup> adopted the generic name *Apus*, he confessed that he had been in two minds about the animal concerned. 'The feet,' he says, 'are most peculiar in this water worm, if feet they can be called, and are not rather fins, as I feel bound to regard them. Therefore, those who take them for feet must call this insect *polypus* (many-legs), but I call it *apus* (no-legs).' These appendages are very numerous, as many as sixty pairs or more, attached to twenty-seven segments. They are adapted for swimming movements and for respiration, but have no walking capacity whatever. They are only indistinctly articulated, and from the principal joints there are given off subarticulated lashes, which in the first pair attain a great length. By help of all these quasi-joints on the quasi-legs and the extremely numerous articulations in the pair of filiform caudal appendages, Schæffer is said to have counted up more than 1,800,000 separate parts in *Apus cancriformis*. The eleventh pair of legs or fins is that which in the female carries the egg-sacs. Behind this pair two of the segments carry six pairs of appendages apiece, but the distribution is unequal, for there are terminal segments with no appendages at all. Over all the anterior part of the body there is a broad shield or carapace, carrying near the front three sessile eyes, near together, the median one behind and much smaller than the other two. The young *Apus* on issuing from the egg is quite different from the adult, and is known as a nauplius. The full-grown animal of Schæffer's species,

<sup>1</sup> *List of British Animals in the British Museum*, part iv. 'Crustacea,' p. 84, 1850.

<sup>2</sup> Art. 'Annulosa,' *British Encyclopædia*, p. 404, pl. 20, fig. 1, 1816.

<sup>3</sup> *Beschreibung von allerley Insecten in Teutschland*, part x. p. 1, pl. 1, 1732.



## CRUSTACEANS

according to Baird,<sup>1</sup> 'is about two inches and a half long, and one inch and a half diameter; of a brownish yellow colour, clouded with marks of a deeper hue.' Baird, however, figures the carapace as a tolerably bright green, such as I have seen it in a nearly related continental species. Frisch speaks of it as red-brown. When ponds that have long been dry are suddenly filled up again by rain, the *Apus*, like many other Entomostraca, is capable of making within a short time an almost miraculous reappearance. The secret is that its eggs embedded in the dried mud can retain their vitality for an indefinite period.

Another phyllopod of great interest is *Artemia salina* (Linn.), the Brine Shrimp, belonging to the family Branchipodidæ the members of which, though nearly allied to *Apus* are remarkably distinguished not from that alone, but from other crustaceans in general by the entire absence of a carapace. Schlosser, who in 1756 was the first to make this *Artemia* generally known, called it the Brine-worm. He found it in the salt-works at Lymington, and in a long series of carcinological works Lymington has been celebrated as the place where myriads of this species could be found in the salterns, 'the open tanks or reservoirs where the brine is deposited previous to the boiling.' Referring in this and other remarks to a paper by the Rev. Thomas Rackett, F.R.S.,<sup>2</sup> Dr. Baird goes on to say: 'In these reservoirs there is always a certain quantity of this strong brine allowed to remain, and there these little creatures are found in greatest abundance and in greatest enjoyment; whilst in what are called the sun-pans, where the brine is made by the admission of sea-water during the summer, and which are emptied every fortnight, they are never found at all. During the fine days in summer they may be observed in immense numbers near the surface of the water, and as they are frequently of a lively red colour, the water appears to be tinged with the same hue.'<sup>3</sup> From recent enquiries I learn that the salterns have been turned into places of amusement, and there is reason to fear that *Artemia salina* is now missing from the fauna of Hampshire.

Among the Copepoda, *Notodelphys ascidicola*, of Allman, was described by that distinguished naturalist in 1847 from Southampton Water. Its names are indicative of two peculiarities, the generic title alluding to the circumstance that the egg-bearing sac, or matrix, is on the animal's back, the specific to the fact that the animal itself lives in the branchial sac of an ascidian, wherein this tiny creature is able to swim freely about. There is some difficulty in identifying the precise form, because Allman supposed that he had found the species in several localities, and there is reason to believe that he mixed up more than one species and more than one genus.<sup>4</sup> This is an accident to which explorers are exposed, just as from another side they may be tempted to make a plurality of genera and species where one of each would be sufficient. Recently Dr. G. S. Brady has added to the record four more species, all included in the

<sup>1</sup> *Natural History of the British Entomostraca*, p. 30, pl. 1, fig. 1.

<sup>2</sup> *Linn. Trans.*, vol. xi. p. 205, 1815.

<sup>3</sup> Baird, *British Entomostraca*, p. 58.

<sup>4</sup> G. S. Brady, *Monograph of British Copepoda*, Ray Society, vol. i., p. 129, 1878.

## A HISTORY OF HAMPSHIRE

prolific genus *Cyclops*. Of *Cyclops viridis*, Jurine, which is very common in small sheets of fresh water, he says: 'It occurs sometimes also in slightly brackish water—as at Lymington, Hampshire.'<sup>1</sup> *Cyclops kaufmanni*, Uljanin, he has found 'in Minstead Mill-dam, Hants.'<sup>2</sup> He obtained *Cyclops fimbriatus*, Fischer, 'in Balmer Lawn Pond, and at Castle Malwood, both in the New Forest,'<sup>3</sup> and *Cyclops æquoreus*, Fischer, at Lymington, the brackish pools of salt marshes being commonly frequented by this species.<sup>4</sup> Still more recently the same writer has recorded three species of Cladocera from this county. Concerning *Daphnia obtusa*, Kurz, he says: 'For specimens which I refer to this species I am indebted to Mr. D. J. Scourfield, by whom they were taken in a pond at Totland Bay, Isle of Wight.'<sup>5</sup> The Norwegian *Daphnia schædleri*, Sars, may be considered a rarity in England, for Dr. Brady observes: 'The only place in which I have found *D. schædleri* is Minstead Mill-dam, Hants, where I took it, not very plentifully, in June, 1890.'<sup>6</sup> He mentions that *Moina rectirostris* (O. F. Müller) was taken by Mr. Scourfield at the Isle of Wight.<sup>7</sup> The Copepoda and Cladocera form a vast population, in regard to which the waters of Hampshire need not fear competition with other parts of England, but a discussion of the groups will be more appropriate to some county in which the species actually recorded are more numerous.

For a similar reason we may pass over the Ostracoda, and the Thyrostraca, better known as cirripedes or barnacles. Only it may be well to say of the Ostracoda, that at least about a score of fossil species are recorded from the strata of the county, and that this extensive tribe of crustaceans, though of immemorial age, is still in the vigour of its existence.

The following species of Crustacea, among others, have been obtained in abundance by Mr. Garstang, near St. Helen's, Isle of Wight, and are worthy of special mention: *Nebalia bipes*, Fabr., under stones in muddy sand; *Palæmonetes varians*, Leach, in a brackish ditch between Sea View and Ryde; and *Athanas nitescens*, Montagu, in crevices under clay boulders or on *Zostera* beds. The latter species has not hitherto been recorded east of Devonshire. *Pirimela denticulata*, referred to above, has been frequently observed by Mr. Garstang to inhabit coarse clean shell sand, in which it burrows.

<sup>1</sup> *Natural History Transactions of Northumberland, Durham, and Newcastle-upon-Tyne*, vol. xi. pt. i., 17 (extract).      <sup>2</sup> *Ibid.*, p. 25.      <sup>3</sup> *Ibid.*, p. 26.

<sup>4</sup> *Ibid.*, p. 27.      <sup>5</sup> *Ibid.*, vol. xiii. pt. ii., 224.      <sup>6</sup> *Ibid.*, p. 226.      <sup>7</sup> *Ibid.*, p. 245.



# FISHES

The present list of Hampshire fishes is not an extensive one, as little attention has hitherto been paid to the marine species. Of the latter, I have only listed such as have actually been recorded on good authority, or which, being of common occurrence to the east as well as to the west of the county, are certainly to be found on or off its coast. No doubt many of the rarer or accidental visitors to the south coast, east of Devonshire, will eventually be added, but I have not thought it desirable to include them in the list until authenticated data are available.

In the following enumeration an asterisk prefixed to the name indicates a freshwater species ; two asterisks denote occurrence in both fresh and salt water :—

## TELEOSTEANS

### ACANTHOPTERYGII

- \* 1. Perch. *Perca fluviatilis*, Linn.

Found in suitable localities (rivers, lakes) in Hampshire, but absent from the Isle of Wight.

- \*\* 2. Sea Bass. *Morone labrax*, Linn. (*Labrax lupus*, Day).

This fish frequents the mouths of rivers, which it occasionally ascends above tidal influence, from May to October or November. According to Mr. Barron, quoted by Day, large specimens are frequently obtained in Portsmouth harbour and its various branches, while numbers of the young frequent Haslar Lake.

3. Common Sea Bream. *Pagellus centrodontus*, Delaroche.

Retires to deep sea in severe winters.

4. Pandora Sea Bass. *Pagellus erythrinus*, Linn.

A migratory species found in summer and autumn.

5. Red Mullet. *Mullus barbatus*, Linn.

6. Common or Ballan Wrass. *Labrus maculatus*, Bl.

7. Baillon's Wrass. *Crenilabrus melops*, Linn.

8. Goldsinny Wrass. *Ctenolabrus rupestris*, Linn.

- \* 9. Miller's Thumb or Noggle-head. *Cottus gobio*, Linn.

Common in brooks, and noticed by Gilbert White together with the loach and the stickleback.

## A HISTORY OF HAMPSHIRE

10. Father-lasher or Bull-head. *Cottus scorpius*, Linn.  
Common on the coast, and often caught in rock-pools.
11. Grey Gurnard. *Trigla gurnardus*, Linn.
12. Red Gurnard. *Trigla cuculus*, Linn.
13. Sapphirine Gurnard, or Tubfish. *Trigla hirundo*, Linn.
14. Pogge, or Armed Bull-head. *Agonus cataphractus*, Linn.
15. Lump-sucker. *Cyclopterus lumpus*, Linn.
16. Sea-snail. *Liparis vulgaris*, Flem.
17. Diminutive Sea-snail. *Liparis montagui*, Donovan.
18. Spotted Goby. *Gobius minutus*, Gmel.
19. Two-spotted Goby. *Gobius ruthensparri*, Euphr.
20. Willughby's Goby. *Gobius paganellus*, Gmel.
21. Rock Goby. *Gobius niger*, Linn.  
Restricted to rocky localities.
22. John Dory. *Zeus faber*, Linn.  
Leaves shallow waters in winter.
23. Boar-Fish. *Capros aper*, Linn.  
Of accidental occurrence in summer. Has been found at Poole, at Bournemouth, and at the Isle of Wight.
24. Scad or Horse-mackerel. *Caranx trachurus*, Linn.
25. Mackerel. *Scomber scombrus*, Linn.  
The mackerel is found on the south coast all the year through, but large shoals approach only during the warmer months. In mild seasons these appear first at Portsmouth in January or February.
26. Greater Weever. *Trachinus draco*, Linn.  
This fish produces a poisonous secretion, which renders pricks from its spines very painful.
27. Lesser Weever. *Trachinus vipera*, Cuv. and Val.  
More venomous than the preceding.
28. Dragonet. *Callionymus lyra*, Linn.  
Adults differ remarkably according to sexes, and have long been regarded as belonging to two species: *C. lyra* (the male) and *C. dracunculus* (the female).
29. Shanny. *Blennius pholis*, Linn.  
Common in pools on the coast.



## FISHES

### ANACANTHINI

- 30. Cod. *Gadus morrhua*, Linn.
- 31. Haddock. *Gadus æglefinus*, Linn.
- 32. Bib or Pout. *Gadus luscus*, Linn.
- 33. Power or Poor-Cod. *Gadus minutus*, Linn.  
Only used as bait ; worthless as a food-fish.
- 34. Coal-fish. *Gadus virens*, Linn.
- 35. Whiting. *Gadus merlangus*, Linn.
- 36. Pollack. *Gadus pollachius*, Linn.
- 37. Hake. *Merluccius vulgaris*, Cuv.
- 38. Fork-beard. *Phycis blennioides*, Bl. Schn.
- 39. Ling. *Molva vulgaris*, Flem.
- 40. Five-bearded Rockling. *Motella mustela*, Linn.
- 41. Three-bearded Rockling. *Motella tricirrata*, Bl.
- 42. Turbot. *Rhombus maximus*, Linn.
- 43. Brill. *Rhombus lævis*, Linn.
- 44. Common Topknot. *Zeugopterus punctatus*, Bl.
- 45. Megrim. *Lepidorhombus megastoma*, Donovan.
- 46. Plaice. *Pleuronectes platessa*, Linn.
- 47. Lemon-dab. *Pleuronectes microcephalus*, Donovan.
- 48. Dab. *Pleuronectes limanda*, Linn.
- \*\* 49. Flounder. *Pleuronectes flesus*, Linn.  
Found at the mouths of large rivers, which it ascends beyond tidal influence.
- 50. Sole. *Solea vulgaris*, Quens.
- 51. Lemon Sole, or French Sole. *Solea lascaris*, Risso.
- 52. Thickback. *Solea variegata*, Donovan.

### PERCESOCES

- \*\* 53. Grey Mullet. *Mugil capito*, Cuv.

This species, which ascends rivers and delights in brackish ponds, is remarkable for its exceptionally wide geographical range, extending to the east coast of North and South America, to the Nile, and, across the tropics, to the Cape of Good Hope.

## A HISTORY OF HAMPSHIRE

\*\* 54. Lesser Grey Mullet. *Mugil chelo*, Cuv.

Stated to be more common at Portsmouth than the preceding species.

55. Atherine. *Atherina presbyter*, Jen.

A rather local fish, often called smelt where the true smelt is unknown. Said to be common throughout the year, except during frosts, at Southampton.

56. Larger Launce or Sand-Eel. *Ammodytes lanceolatus*, Lesauv.

57. Lesser Launce. *Ammodytes tobianus*, Linn.

Commoner than the preceding.

58. Garfish. *Belone vulgaris*, Flem.

### HEMIBRANCHII

\*\* 59. Three-spined Stickleback. *Gastrosteus aculeatus*, Linn.

Lives indifferently in fresh and salt water. A large proportion of the specimens found in the sea or in brackish ponds have the sides mailed (*G. trachurus*, *G. semiarmatus*, Cuv.), whilst those inhabiting inland ponds, rivers, and brooks belong to the smooth-tailed form (*G. liurus*, Cuv.).

\* 60. Ten-spined Stickleback. *Gastrosteus pungitius*, Linn.

More local than the preceding, and never found in the sea. Is on record from the Isle of Wight.

61. Fifteen-spined Stickleback. *Gastrosteus spinachia*, Linn.

### LOPHOBRANCHII

62. Broad-nosed Pipe-fish. *Siphonostoma typhle*, Linn.

63. Greater Pipe-fish. *Syngnathus acus*, Linn.

64. Snake Pipe-fish. *Nerophis æquoreus*, Linn.

65. Sea-horse. *Hippocampus antiquorum*, Leach.

Rare.

### HAPLOMI

\* 66. Pike. *Esox lucius*, Linn.

Absent from the Isle of Wight. Abounds in the Test, Itchen and Avon.

### OSTARIOPHYSI

\* 67. Carp. *Cyprinus carpio*, Linn.

Introduced from Asia to Europe in the 12th or 13th century. First mentioned in England in 1496.



## FISHES

- \* 68. Crucian Carp. *Cyprinus carassius*, Linn.

Has been introduced in many ponds and is now fully acclimatized, like the preceding species. The gold-fish (*C. auratus*, Linn.) may be regarded as only a variety of the crucian carp.

- \* 69. Gudgeon. *Gobio fluviatilis*, Flem.

Abundant in all streams.

- \* 70. Rudd. *Leuciscus erythrophthalmus*, Linn.

Recorded from the Isle of Wight.

- \* 71. Roach. *Leuciscus rutilus*, Linn.

- \* 72. Dace. *Leuciscus dobula*, Linn. (*L. vulgaris*, Day).

Occurs, like the preceding, in all rivers and ponds.

- \* 73. Minnow. *Leuciscus phoxinus*, Linn.

Common in Hampshire, but said to be absent in the Isle of Wight.

- \* 74. Tench. *Tinca vulgaris*, Cuv.

Scarce, but on record from the Isle of Wight.

- \* 75. Loach. *Nemachilus barbatula*, Linn.

In small streams.

## MALACOPTERYGII

- \*\* 76. Salmon. *Salmo salar*, Linn.

Found in the Itchen, Test, Avon and Stour. On all these rivers the numbers have very much decreased of late.

- \*\* 77. Trout. *Salmo trutta*, Linn.

In accordance with the opinion of the majority of modern ichthyologists, opinion which my own experience only tends to confirm, the anadromous or sea-trout (*S. trutta*, *S. cambricus*) is here united with the freshwater brown trout (*S. fario*). These appear to be mere local forms, adaptations to special conditions of life, which are so little fixed as to be easily modified by a change in the surroundings; and the technical characters which have hitherto been given for the discrimination of these so-called species break down when we attempt to apply them to a large and varied material.

Mr. Courtenay-Tracy, of Holywell, Bishops Waltham, writes that he thinks the sea-trout come up all suitable streams, certainly all those running into Southampton Water; they go as far as they can, but soon come to impassable barriers, although a specimen determined as sea-trout was caught by him above Winchester. On the Itchen they get up as far as Eastleigh; on the Test, as far as about Dunbridge and even Horsebridge, but most of them are stopped at Romsey.

## A HISTORY OF HAMPSHIRE

- \* 78. Grayling. *Thymallus vexillifer*, Linn.

Is found in the Avon, the Test, and the Itchin.

79. Smelt. *Osmerus eperlanus*, Linn.

80. Anchovy. *Engraulis encrasicolus*, Linn.

A casual visitor.

81. Herring. *Clupea harengus*, Linn.

82. Pilchard or Sardine. *Clupea pilchardus*, Linn.

A casual visitor.

83. Sprat. *Clupea sprattus*, Linn.

- \*\* 84. Shad. *Clupea alosa*, Linn.

- \*\* 85. Thwait. *Clupea finta*, Cuv.

This and the preceding species enter rivers in the spring.

### APODES

- \*\* 86. Eel. *Anguilla vulgaris*, Turt.

Breeds in the sea, in depths of 100 fathoms or more. Myriads of elvers ascend rivers in spring and early summer. *Leptocephalus brevirostris*, Kaup, is the larval form. Fishing for eels is carried on throughout the year from Emsworth and Southampton.

- \* 87. Conger. *Conger vulgaris*, Cuv.

The larva has been described as *Leptocephalus morrisii*, Gron. Much remains to be done with regard to the elucidation of the life-histories of the eel and the conger.

### CHONDROPTERYGIANS

88. Six-gilled Shark. *Notidanus griseus*, Cuv.

A specimen is on record from off the Isle of Wight, Nov. 1845.

89. Rough-Hound, or Small-spotted Dogfish. *Scyllium canicula*, Linn.

90. Nurse-Hound, or Large-spotted Dogfish. *Scyllium stellare*, Linn.  
(*S. catulus*, Day).

91. Basking Shark. *Selache maxima*, Linn.

A specimen, 28 feet long, now preserved in the British Museum (Natural History) was stranded at Shanklin in February, 1875. This is the largest shark of the North Atlantic, growing to a length of 30 feet or more. Unlike ordinary sharks, its mouth is armed with minute teeth, its food consisting of small fishes and other marine animals; it is dangerous to men only for the blows which, when attacked, so powerful a fish is able to strike at boats.



## FISHES

92. Thrasher. *Alopias vulpes*, Gmel.

On record from off Ventnor (1864), Christchurch (1881), and Poole (1882).

93. Smooth-Hound. *Mustelus lævis*, Flem. (*M. vulgaris*, Day).

94. Tope. *Galeus vulgaris*, Flem.

95. Picked Dog-fish. *Acanthias vulgaris*, Risso.

96. Monk-fish or Angel. *Rhina squatina*, Linn.

97. True Skate. *Raia batis*, Linn.

98. Thornback. *Raia clavata*, Linn.

99. Homelyn. *Raia maculata*, Montagu.

100. Sting Ray. *Trygon pastinaca*, Linn.

101. Eagle-Ray or Whip-Ray. *Myliobatis aquila*, Linn.

Recorded from off Christchurch, October, 1880.

## CYCLOSTOMES

- \*\* 102. Sea Lamprey. *Petromyzon marinus*, Linn.

An anadromous fish, ascending rivers to breed.

- \* 103. Lampern. *Petromyzon fluviatilis*, Linn.

In rivers.

- \* 104. Mud Lamprey. *Petromyzon branchialis*, Linn.

In rivers and brooks.

# REPTILES AND BATRACHIANS

The herpetological fauna of Great Britain being so extremely meagre, it is of interest to observe that Hampshire, together with the adjacent parts of Surrey and Dorsetshire, can boast of possessing indigenous representatives of all the species on the British list, with the exception of the Edible Frog (*Rana esculenta*), perhaps only introduced in the counties of Cambridgeshire and Norfolk, where it has existed for at least nearly a century at any rate. The Isle of Wight on the other hand is not possessed of any but the generally distributed species. It is worthy of remark that the two species which from their restricted range in this country are of special interest, viz. the smooth snake and the sand lizard, agree in having pretty nearly the same geographical distribution in Europe and Western Asia, where, as with us, the former commonly feeds on the latter. Here also in England the localities inhabited by them, viz. the sandy heaths bordering the New Forest district, North Hampshire and South-west Surrey, exactly correspond, although on the Continent these reptiles are by no means confined to such situations, and do not always occur simultaneously—the smooth snake preferring hilly, wooded districts, the sand lizard frequenting open spaces in woods and damp meadows as well as sandy heaths. The name ‘sand lizard,’ an appropriate one with us, is in a general sense inapplicable to Continental examples. Considering the geographical range of these two reptiles, their occurrence in England is a far less remarkable fact than their localization here, for which it is impossible to offer an explanation.

The common lizard, the slow-worm, the adder and the three newts appear to be generally distributed in suitable localities, the natter-jack toad is strictly local and partial to certain sandy spots, while the common frog and toad may be described as ubiquitous, though perhaps nowhere very abundant. Owing to its slow movements and confident disposition, the slow-worm, so useful from its subsisting mainly on slugs, falls an easy victim to the ineradicable superstitious aversion of country people, and its numbers decrease year after year; and hence this once abundant reptile is in greater danger of extermination by human agency than any of its kindred of the British fauna.

The adder or viper, although subjected to the same, but in this case justifiable, persecution, seems to hold its own and is still very abundant especially in the New Forest, where hundreds are destroyed yearly, mostly by a professional viper-hunter well known to the visitors of the Forest. In this country, as on the Continent, cultivation of the land



## REPTILES AND BATRACHIANS

appears to be the only efficient agent of extermination of this noxious snake.

### REPTILES

#### LACERTILIA

1. Common Lizard, *Lacerta vivipara* (Jacq.).
2. Sand Lizard, *Lacerta agilis* (Linn.).

Distinguished from the common species by its larger size (it is seven or eight inches in length), its more massive form and bigger head, and the ocellar black-and-white spots with which it is usually marked. Males, especially during spring and early summer, are coloured bright green on the sides and lower parts, and such specimens have often been mistaken from the time of Gilbert White for the green or Jersey lizard, which does not occur in this country. Instead of being, like its congener, ovo-viviparous, this species lays oval white eggs, which take some weeks to hatch.

The sand lizard is widely distributed over Eastern Europe from Sweden and Russia to the Black Sea and the Caucasus, and it is also an inhabitant of a considerable portion of Western Asia; it is common throughout Austria and Germany, but to the west it becomes generally rarer or more local, and is absent from the south-west of France as well as from the Spanish and Italian Peninsulas. In England it has only been found in Hampshire, chiefly in the sandy heaths bordering the New Forest, whence it extends into neighbouring parts of Dorsetshire,<sup>1</sup> Berkshire,<sup>2</sup> and to Farnham, in Surrey. The latter locality derives special interest from the fact that the lizards found there quite recently by Mr. Bryan Hook are evidently the descendants of the 'beautiful green *lacerti* on the sunny sand-banks near Farnham,' mentioned by Gilbert White in his *Natural History of Selborne*. Curiously, White never came across such lizards in the limits of his own county.

3. Slow-worm, or Blind-worm, *Anguis fragilis* (Linn.).

#### OPHIDIA

4. Common or Ringed Snake, *Tropidonotus natrix* (Linn.), (*Natrix torquata*, Ray).
5. Smooth Snake, *Coronella austriaca* (Laur.), (*C. lævis*, Lacép.).

First discovered in England by the late Mr. Frederick Bond and the Rev. O. P.-Cambridge between Ringwood and Wimborne in 1853, and by the Hon. Arthur Russell at Bournemouth a few years later, this species was introduced in the British list by the late Dr. J. E. Gray in 1859. Since that time it has been often observed and recorded from Bournemouth, Poole Heath, and about the New Forest. It has also been observed in West Surrey, at Chobham, by Mr. H. N. Ridley, in

<sup>1</sup> Poole Heath.

<sup>2</sup> Wellington College, as stated by S. Flower.

## A HISTORY OF HAMPSHIRE

1882, and quite lately several specimens have been taken near Farnham by Mr. Bryan Hook. The general distribution of this snake is a very extensive one, comprising nearly the whole of Europe, as far north as  $62\frac{1}{2}^{\circ}$  in Scandinavia, Transcaucasia, and Syria. A variety with more pointed snout and larger rostral shield, described as *Coronella italica*, and long believed to be peculiar to Southern Europe, has recently been shown to be represented by certain individuals obtained in Hampshire, proving the form to be untenable as a local variety. The smooth snake unlike the common snake is as a rule of irascible temper, and bites when first caught; but it is perfectly harmless. It bears a certain resemblance in colour to the viper, whose reversed initial it likewise often carries on the back of the head; but it may be readily distinguished by its agility, the round shape of the pupil of the eye, the smooth scales, and, generally, by the absence of a zigzag band down the back. Like the viper but unlike the common snake it is ovo-viviparous, the young issuing immediately after birth from the membranous envelope in which they are invested. The food consists of other reptiles—lizards, slow-worms and even small snakes. The largest British specimens measure only about eighteen inches in length.

### 6. Common Viper or Adder, *Vipera berus* (Linn.).

This poisonous snake varies much in colour, and the variations have often been regarded as adaptations to the surroundings, as local varieties, or even as species. I have pointed out that, with rare exceptions, specimens with the zigzag dorsal band boldly marked in very dark brown or black are males, whilst those in which the markings are of a paler brown, or more effaced, are females. So-called 'white vipers,' e.g. white with black markings, are invariably males; 'red vipers' are females. The male may be readily distinguished from the other sex by the longer and more swollen tail, with more numerous paired shields on the lower surface, which number thirty-five to forty in males, twenty-eight to thirty-three in females.

## BATRACHIANS

### ECAUDATA

1. Common Frog, *Rana temporaria* (Linn.).
2. Common Toad, *Bufo vulgaris* (Laur.).
3. Natter-Jack Toad, *Bufo calamita* (Laur.).

This lively little toad is easily distinguished from its congener by the presence, in most cases, of a yellow line along the middle of the back and by its gait. Owing to its remarkably short hind limbs it is quite unable to hop; it supplies the deficiency by running at a considerable pace with the body raised from the ground, but stopping every few seconds. It is a good burrower in sandy localities, for which it shows



## REPTILES AND BATRACHIANS

a decided predilection, and requires less moisture than any other batrachian. It often occurs in the sand-hills close to the sea, where in summer adults as well as young may be seen crawling or running about in full sunshine among the sparse tufts of marram grass whilst the eggs and larvæ are developing in neighbouring pools of strongly brackish water. The breeding season falls much later than in the case of the common toad, and takes place as a rule in May and June; unlike the common species, these toads are found in the water only at night, during the breeding season, and produce, after sunset, an excessively loud croak, consisting of one rolling note.

*Bufo calamita* is found in Western Europe, from the extreme south of Scotland and the west coast of Ireland to the Spanish Peninsula. It is very local with us, although, where it exists, usually more abundant than the common species. In Thomas Bell's time it was found in great numbers in White's garden at Selborne, but, and this is most remarkable when we think of the garrulous nature of this batrachian, it appears to have entirely escaped the notice of the great naturalist. In his edition of White's *Selborne*, Bell remarks that the Natter-Jack, which was once so common, had abandoned his garden, without any cause having ever suggested itself for its disappearance. The toad bred in a pond on the heath at Wolmer. We have other evidence of colonies of this species shifting their quarters, and with a view to an understanding of the causes of the phenomenon, it would be useful to draw up a list of the localities now inhabited by the Natter-Jack, which could easily be done by the co-operation of residents in the county, who would simply need to use their ears immediately after sunset in May and June.

## CAUDATA

4. Great Crested Newt, *Molge cristata*, Laur.
5. Common Newt, *Molge vulgaris*, Linn., *Triton punctatus* (Latr.).
6. Palmated Newt, *Molge palmata*, Schn., *Triton palmipes* (Daud.).

The palmated newt is more widely distributed in Great Britain than is the common newt, being the only species found in the greater part of Scotland, in Wales and in Cornwall. It is also found in the Channel Islands, from which the common newt appears to be absent. In most parts of England it occurs in company with the latter. In Hampshire it is known from Selborne and the New Forest, and will probably be found elsewhere. Ryde in the Isle of Wight is among the earliest localities given, and it has since been obtained from Alum Bay and Brading. It resembles the common newt, with which it has often been confounded, but may be distinguished from it at all stages of life and at all seasons by the absence of every trace of pigment on the throat, which is of a transparent flesh colour. The breeding male is easily recognised by the very low, straight-edged dorsal crest, the square shape of the body, the presence of a black web between the toes and by the truncated tail terminating in a thread-like filament.

# BIRDS<sup>1</sup>

Few English counties are probably more favourably situated for a great variety of bird life than Hampshire. The woodland district of the north, the great chalk plain of the centre, the long low seaboard, the numerous rivers with their delightful water meadows, and above all the 90,000 acres of the New Forest in the west provides suitable ground for almost every bird that can be expected to be seen in an English county, while the cliffs of the Isle of Wight furnish homes for all our rock-breeding species with comparatively few exceptions. There is no doubt whatever that, owing to the great increase of game preservation during the last twenty years, all small birds, with possibly the exception of the Dartford warbler, have greatly increased in numbers. The zealous care with which every wood and hedgerow is protected from trespass largely contributes to this ; whilst, undoubtedly, the reduction in the numbers of magpies, crows, jays, stoats and weasels, however much to be regretted by those who love Nature in her natural state, have materially aided to bring about the same result. It is also very gratifying to know that many of those who have the power to offer protection to our rarer and more interesting birds now do so ; and the general interest taken in natural history appears to be increasing. There is, however, plenty of room for further improvement in this direction. This county, owing to the New Forest being within its area, has been the home of some of our rarer birds longer than almost any county in England ; but, unfortunately, although every bird that needs preservation there is, as far as possible, carefully protected, yet owing to its being free to every one to wander where he pleases, happy results are most difficult to bring about.

A good illustration of this is the honey buzzard, which, though at one time breeding regularly, has now practically ceased to do so since 1879. It would not do to refer to the New Forest area without mentioning the blackgame, which although comparatively abundant until the year 1883, have owing to disease, and at one time to a superabundant

<sup>1</sup> In compiling the list of Hampshire birds I must return my best thanks to the under-mentioned gentlemen who have kindly assisted me with information from those parts of the county with which I am unacquainted. The Viscount Baring ; the Hon. J. Scott Montagu ; the Hon. Gerald Lascelles ; the Hon. A. H. Baring ; Sir Charles Shelley, Bart. ; Rev. J. E. Kelsall ; J. Stares, Esq. ; Courtenay Tracy, Esq. ; E. Hart, Esq. ; and Capt. G. E. Shelley.



## BIRDS

supply of foxes, gradually been reduced in numbers, though on more than one occasion they have had a good infusion of fresh blood. I however think that their favourite haunts have to a great extent been curtailed owing to the growth of plantations and the destruction of large areas of old furze brake. But it is to be hoped that for many years to come they may hold their own, and perhaps increase. For, as is well known, that although 100 years ago they were considered extinct in Wolmer Forest, they have just managed to exist there until the present day;<sup>1</sup> though this result may have been brought about by a later introduction, known to have taken place some years ago. The large tracts of heath are not productive of many birds, with the exception of a few pairs of meadow pipits; but as soon as boggy places crop up, a pair or two of peewits almost always appear. It is also on these barren heaths that a large patch of feathers, showing up very plainly from a long distance on the black ground, tells where the peregrine falcon has stricken down a woodpigeon, and on the nearest small eminence the well-picked skeleton may be found with the keel of the breast-bone eaten away, while the falcon herself may by no means infrequently be seen soaring or passing directly overhead. In the bogs of more importance a good many pairs of snipe breed, probably nearly as many as have ever done so, while more peewits and more meadow pipits are in evidence; and in some of the larger and wetter bogs a few pairs of redshanks may be added to the list, while a certain number of teal and wild ducks nest almost everywhere. By those who know where to look, Montagu's harrier may be seen in most seasons. The large fir plantations appear very deficient in bird life as they do everywhere, but they are the homes of numerous goldcrests, a good many tits, and from July onwards, in most years, of flocks of crossbills. The large old woods of mixed beech and oak are the haunts of very many interesting British birds. Nuthatches abound; the green woodpecker is common, as in fact it is throughout the Forest; the great spotted woodpecker is by no means rare; while the lesser spotted woodpecker, though less in evidence, is almost always present. All our English tits abound, and in the opener places redstarts may be always in summer found. In one or two favoured places the common buzzard may still be observed, either floating in circles over head, or flying heavily out of a tree, very often quite close to the observer.

Throughout the woodlands of the Forest it will be observed that the wood warbler outnumbers both chiffchaff and willow warbler, more especially in certain districts. Although subjected to judicious thinning the jay abounds, and there are far more than sufficient carrion crows and magpies. Of the kestrel and sparrow hawk there are plenty, but

<sup>1</sup> 'But there was a nobler species of game in this forest, now extinct, which I have heard old people say abounded much before shooting flying became so common, and that was the heath-cock, black-game, or grouse. When I was a little boy I recollect one coming now and then to my father's table. The last pack was killed about thirty-five years ago; and within these ten years one solitary grey-hen was sprung by some beagles in beating for a hare.'—White's *Nat. Hist. of Selborne*, Letter vi.

## A HISTORY OF HAMPSHIRE

the beautiful and harmless hobby has almost ceased to visit the Forest. The brown owl is abundant ; but the barn owl is rare, the country not being particularly suited to its habits, and the longeared owl is not so common as might be expected.

This sketch of the ornithology of the New Forest is of course not intended in any way as a list of the birds, but only of some of those that might be met with by any one who knew how to find them during a walk in spring. I have treated more of the New Forest region than I had intended, but the district is so peculiar and so unlike any other part of this county, or indeed of any county, that it seems particularly deserving of record.

On the chalk plains of Hampshire the stone curlew nests annually in many localities, and in spite of opinions to the contrary that interesting bird is on the increase. This also may be said of the great crested grebe, which now frequents many of the large sheets of water throughout the county. I saw no fewer than eleven individuals at one time not long ago on the Fleet pond. The tufted duck too has established itself as a breeding species, as it has in many other parts of England, and the shoveller and pochard are recorded as nesting in most seasons. It will thus be seen that though many of our more interesting birds (principally those of a more or less predatory nature) are greatly reduced in numbers—many of them to the verge of extinction—there is some recompense in the increase of others which are beautiful and harmless.

1. Missel or Mistletoe Thrush. *Turdus viscivorus*, Linn.

A common resident, and one which has undoubtedly largely increased in numbers within the last fifty years.

2. Song Thrush. *Turdus musicus*, Linn.

An abundant resident, although large numbers migrate and comparatively few remain in severe weather.

3. Redwing. *Turdus iliacus*, Linn.

A common winter visitor. A few arrive in September.

4. Fieldfare. *Turdus pilaris*, Linn.

As the preceding ; but in very mild winters scarcely any come to the south of the county, a few only passing northwards in the spring.

5. White's Thrush. *Turdus varius*, Pallas.

The first recorded British example was shot near Christchurch in January, 1828.

6. Blackbird. *Turdus merula*, Linn.

Abundant, and the hardiest of all the thrushes.

7. Ring Ousel. *Turdus torquatus*, Linn.

Spring and autumn migrant. Very scarce in spring, but occasionally common in autumn.



## BIRDS

8. Wheatear. *Saxicola ænanthe* (Linn.).

The earliest spring migrant, abundant throughout the chalk district. A few nest on the heaths of the New Forest. Particularly common in the Isle of Wight.

9. Whinchat. *Pratincola rubetra* (Linn.).

A fairly common spring migrant, arriving in the middle of April.

10. Stonechat. *Pratincola rubicola* (Linn.).

A common resident on all commons and heaths, and generally where furze abounds. Occasionally in great numbers on autumn migration.

11. Redstart. *Ruticilla phænicurus* (Linn.).

A spring visitor, but very local as a breeding species. A good number breed throughout the New Forest, often in the most out of the way parts. The nest is usually in a hollow 'spout' of holly or birch.

12. Black Redstart. *Ruticilla titys* (Scopoli).

An uncommon winter visitor.

13. Bluethroat. *Cyanecula suecica* (Linn.).

Scarce on migration. One with an entirely blue throat was observed by Capt. Hadfield in the Isle of Wight.

14. Redbreast. *Erithacus rubecula* (Linn.).

As throughout the British Islands.

15. Nightingale. *Daulias lusciniæ* (Linn.).

A common summer visitor, but very local in large tracts of forest land, only frequenting spots where there is a certain amount of deciduous coppice.

16. Whitethroat. *Sylvia cinerea* (Bechstein).

Most abundant summer visitor from April to September.

17. Lesser Whitethroat. *Sylvia curruca* (Linn.).

Rather scarce and local; summer visitor.

18. Blackcap. *Sylvia atricapilla* (Linn.).

Probably the first of the warblers to arrive in spring. A few occasionally remain almost throughout the winter.

19. Garden Warbler. *Sylvia hortensis* (Bechstein).

Much more local than the last, and arrives later.

20. Dartford Warbler. *Sylvia undata* (Boddaert).

Resident, scarce, and local. It is probably the only small bird, with the exception of the goldfinch, that has decreased in numbers during the last half-century, the restricted area of the furze covert in which it alone will live and the greed of collectors having contributed to this circum-

## A HISTORY OF HAMPSHIRE

stance. There is, however, a certain migration of this species, for on one occasion, when partridge driving in November, seeing a number of small, dark birds flitting up in a dense piece of rape in front of the drivers, I walked out after the drive was over, and found them to be Dartford Warblers in some numbers ; this was far from any common or furze of any extent.

21. Goldcrest. *Regulus cristatus*, K. L. Koch.

Common, and has probably greatly increased with the greater extent of fir wood.

22. Firecrest. *Regulus ignicapillus* (Brehm).

An irregular visitor, but probably frequently overlooked.

23. Chiffchaff. *Phylloscopus rufus* (Bechstein).

Abundant, and competes with the blackcap for being the first warbler to arrive. It is not, however, so numerous as the willow warbler, at any rate in the New Forest region, after that bird has arrived. A very great proportion of the numbers that are present during April pass on.

24. Willow Warbler. *Phylloscopus trochilus* (Linn.).

The most abundant and generally distributed of the three common green warblers. They are all locally called 'green wrens.'

25. Wood Warbler. *Phylloscopus sibilatrix* (Bechstein).

The last to arrive and the most local of the three, yet very common in suitable districts, viz., that of large woods of deciduous trees, especially beech and oak. In some districts it is undoubtedly the most common of all three species.

26. Reed Warbler. *Acrocephalus streperus* (Vieillot).

Common in suitable localities throughout the county.

27. Marsh Warbler. *Acrocephalus palustris* (Bechstein).

Undoubtedly a scarce and local bird, but I fancy not so much so as is often supposed.

28. Great Reed Warbler. *Acrocephalus turdoides* (Meyer).

Accidental. One was killed at Ringwood, June 3rd, 1884.

29. Sedge Warbler. *Acrocephalus phragmitis* (Bechstein).

The most abundant and generally distributed of all the reed warblers.

30. Aquatic Warbler. *Acrocephalus aquaticus* (Gmelin).

Is recorded by Mr. Hart as accidental ; one was killed in September, 1896, near Christchurch.



## BIRDS

31. Grasshopper Warbler. *Locustella nævia* (Boddaert).

Irregularly distributed throughout the county, arriving rather early. In some seasons it is by no means uncommon.

32. Hedge Sparrow. *Accentor modularis* (Linn.).

Ubiquitous.

33. Alpine Accentor. *Accentor collaris* (Scopoli).

An accidental visitor.

34. Dipper. *Cinclus aquaticus*, Bechstein.

Occasionally occurs, but only as a visitor.

35. Bearded Reedling. *Panurus biarmicus* (Linn.).

Now extinct in the county, but it undoubtedly occurred at one time in the Avon valley, and is reported to have occurred elsewhere.

36. Long-tailed Tit. *Acredula caudata* (Linn.).

Is common throughout the county. Resident.

37. Great Tit. *Parus major*, Linn.

Abundant and resident. I should be inclined to consider it the most abundant of the tits.

38. Coal Tit. *Parus ater*, Linn.

Not so abundant as the last, but still a very common bird.

39. Marsh Tit. *Parus palustris*, Linn.

Considered to be the scarcest of the four common British tits. It is however common enough, but somewhat local; and though caring nothing for marshes, is most abundant in coppice woods growing on a clay soil.

40. Blue Tit. *Parus cæruleus*, Linn.

In about equal numbers with the great tit. I do not consider it quite so numerous. This is the only tit that appears to be affected by severe frost.

41. Crested Tit. *Parus cristatus*, Linn.

One is reported to have been shot near Stanpit Marsh, by Mr. Footner, in 1846.

42. Nuthatch. *Sitta cæsia*, Wolf.

This charming bird is fortunately common throughout the county wherever there are woodlands containing a certain amount of old timber. I should consider it an increasing species, and it has practically no enemy. It is reported not to occur in the Isle of Wight.

43. Wren. *Troglodytes parvulus*, Koch.

Found everywhere, even out in the middle of the wildest heaths.

## A HISTORY OF HAMPSHIRE

44. Tree Creeper. *Certhia familiaris*, Linn.

Common, and generally distributed, but nowhere numerous.

45. Pied Wagtail. *Motacilla lugubris*, Temminck.

Common. Resident in small numbers, even during the most severe frost, but the main body return about the end of February.

46. White Wagtail. *Motacilla alba*, Linn.

A few appear every spring, but do not stop.

47. Grey Wagtail. *Motacilla melanope*, Pallas.

A regular winter visitor. Not numerous, but to be seen everywhere where there are streams. A very few occasionally nest, principally in the north of the county. Used always to nest in an old covered bridge at Avington (Capt. Shelley).

48. Yellow Wagtail. *Motacilla raii* (Bonaparte).

A common, though local summer visitor; particularly abundant in the Avon valley.

49. Tree Pipit. *Anthus trivialis* (Linn.).

A common summer visitor.

50. Meadow Pipit. *Anthus pratensis* (Linn.).

The 'titlark' is one of the most familiar birds, but in the breeding season is somewhat local, abounding all over the wildest heaths and bogs, but avoiding cultivated land.

51. Tawny Pipit. *Anthus campestris* (Linn.).

Is recorded by Mr. Hart as having occurred at Stanpit Mudeford, 1879.

52. Rock Pipit. *Anthus obscurus* (Latham).

Resident on the coast. Common round the Isle of Wight.

53. Golden Oriole. *Oriolus galbula*, Linn.

An occasional summer visitor. It is reported by Mr. Hart to have bred; as doubtless it would breed if undisturbed.

54. Great Grey Shrike. *Lanius excubitor*, Linn.

I consider this shrike to be a regular winter visitor to the county, at any rate to the district I am best acquainted with. I have rarely failed to see one or more at different times during the winter on the Beaulieu and Hill Top plains, usually sitting on the top of stunted and wind swept Scotch fir seedlings, from which on being approached they would drop off, and flying low across the heath appear again on the top of another a hundred yards or so further on.

55. Lesser Grey Shrike. *Lanius minor*, Gmelin.

A Lesser Grey Shrike is recorded in Howard Saunders's *British Birds* as having been killed at Heron Court in 1842.



## BIRDS

56. Red-backed Shrike. *Lanius collurio*, Linn.

The 'butcher bird' is a regular summer visitor to all parts of the county; arriving about May 1st. In some districts it might be considered common, but is of course nowhere numerous.

57. Woodchat. *Lanius pomeranus*, Sparrman.

An irregular summer visitor. In Howard Saunders's *Manual*, it is recorded as having bred twice near Freshwater, Isle of Wight.

58. Waxwing. *Ampelis garrulus*, Linn.

An irregular winter visitor, occasionally in some numbers. In the severe weather of February, 1895, two came and fed on currants that were placed for thrushes under a large silver-fir on my lawn.

59. Pied Flycatcher. *Muscicapa atricapilla*, Linn.

Scarce spring and autumn migrant. I cannot get satisfactory information as to its nesting, though it is reported to have done so.

60. Spotted Flycatcher. *Muscicapa grisola*, Linn.

An abundant summer migrant; arriving the end of April.

61. Swallow. *Hirundo rustica*, Linn.

The Swallow probably arrives as early and remains as late in Hampshire and the Isle of Wight as anywhere in the British Islands. I have records of it as early as March 18th, and as late as December 7th in the neighbourhood of Lymington, and have seen it in considerable numbers in November.

62. House Martin. *Chelidon urbica* (Linn.).

The main body of Martins arrive later than the swallows, although a few individuals arrive as early, or even earlier. A greater number remain, however, late into the autumn, and on November 9th, 1896, some thousands were assembled on the houses in Lymington, while the telegraph wires by the river were covered with them. These were nearly all birds of the year. Next morning very few remained, but many dead individuals might be picked up in various places, all in very poor condition. In some districts this bird is much scarcer than formerly, owing to the increase in house sparrows who occupy their nests.

63. Sand Martin. *Cotile riparia* (Linn.).

The most regularly early of the three, and the first to depart. It has, I should say, largely increased in numbers.

64. Greenfinch. *Ligurinus chloris* (Linn.).

Is abundant, and generally distributed throughout the county.

65. Hawfinch. *Coccothraustes vulgaris*, Pallas.

The Hawfinch breeds throughout the county in varying numbers, and in winter I have seen frequently as many as two hundred individuals collected together in a kind of straggling flock. As it was considered

## A HISTORY OF HAMPSHIRE

scarce at one time it must have greatly increased in numbers, for it is certainly very far from scarce at the present day.

66. Goldfinch. *Carduelis elegans*, Stephens.

A resident, but considered to be in far fewer numbers than formerly, owing not only to birdcatchers, but also to the disappearance of the rough weed-covered pastures and fallows that it loves. It has however, I think, decidedly increased in numbers during the last ten years. Its numbers are largely augmented by migrants in the autumn, which however are easily distinguished from our native race, by being larger and lighter in colour.

67. Siskin. *Carduelis spinus* (Linn.).

A regular and occasionally common winter visitor, frequenting alders and associating with redpolls.

68. Serin. *Serinus hortulanus*, Koch.

The Serin is recorded as having been first identified as a British bird from a specimen taken near Portsmouth. A bird that is probably often overlooked.

69. House Sparrow. *Passer domesticus* (Linn.).

Too numerous everywhere.

70. Tree Sparrow. *Passer montanus* (Linn.).

By no means numerous, and very local as a breeding species. Occasionally common in winter.

71. Chaffinch. *Fringilla cælebs*, Linn.

Most abundant and generally distributed; a few pair even extending as far as the centres of the large fir woods.

72. Brambling. *Fringilla montifringilla*, Linn.

The Brambling is a regular winter visitor, and occurs most years, often in great numbers.

73. Linnet. *Linota cannabina* (Linn.).

A common resident.

74. Mealy Redpoll. *Linota linaria* (Linn.).

Irregular winter visitor.

75. Lesser Redpoll. *Linota rufescens* (Vieillot).

Local resident, numerous on migration, associating largely with siskins.

76. Twite. *Linota flavirostris* (Linn.).

A winter visitor at irregular intervals.

77. Bullfinch. *Pyrrhula europæa*, Vieillot.

A common resident, and certainly on the increase.



## BIRDS

78. Pine Grosbeak. *Pinicola enucleator* (Linn.).

A Pine Grosbeak is mentioned in Mr. Hart's list of Hants birds as having been in the collection of H. Treasure Jenkins, who told him it had been killed in the New Forest. Authentic British specimens of this bird are extremely rare.

79. Crossbill. *Loxia curvirostra*, Linn.

Arriving in July in most years, sometimes in great numbers; a few often remain to nest, particularly in the neighbourhood of Bournemouth, but they nest so early that they are frequently overlooked in many places.

80. Corn Bunting. *Emberiza miliaria*, Linn.

A common resident.

81. Yellow Hammer. *Emberiza citrinella*, Linn.

A common resident.

82. Cirl Bunting. *Emberiza cirlus*, Linn.

I should consider the Cirl Bunting a characteristic Hampshire bird, certainly in the districts with which I am best acquainted. It is a common inhabitant of all the surroundings of the New Forest, although it does not penetrate much into the Forest itself; its favourite haunts seem to be wooded fields, with a certain amount of high hedgerow timber, from the top of which its monotonous trill, somewhat resembling the first part of the song of the yellow hammer, may be heard from March to November. In its favourite districts it certainly outnumbers the yellow hammer; it is fairly common in the Isle of Wight.

\* Ortolan Bunting. *Emberiza hortulana*, Linn.

Isle of Wight, 1867. [Yarrell].

83. The Reed Bunting. *Emberiza schæniclus*, Linn.

Resident in most marshy places, and by the sides of rivers.

84. Snow Bunting. *Plectrophenax nivalis* (Linn.).

Winter visitors; very plentiful in some seasons.

85. Lapland Bunting. *Calcarius lapponicus* (Linn.).

A rare winter visitor.

86. Starling. *Sturnus vulgaris*, Linn.

One of the most abundant of birds; has greatly increased in numbers during the last fifty years. The greatest enemy of the green woodpecker and great spotted woodpecker, as it appropriates their nesting holes.

87. Rose-coloured Pastor. *Pastor roseus* (Linn.).

Irregular and scarce visitor; one recorded by Mr. Hart, 1841, from Parewell; another, 1862.

## A HISTORY OF HAMPSHIRE

88. Chough. *Pyrrhocorax graculus* (Linn.).

Reported formerly to have lived in the Isle of Wight. Mr. Hart records two as having been killed in Christchurch Bay by one Robert Keynes, January 3rd, 1861.

89. Nutcracker. *Nucifraga caryocatactes* (Linn.).

Very rare straggler ; one recorded by Mr. Hart from Catterns Hill, November 6th, 1868.

90. Jay. *Garrulus glandarius* (Linn.)

Common. I think the jay is certainly more numerous than it was twenty years ago.

91. Magpie. *Pica rustica* (Scopoli).

The magpie is certainly scarcer and more local than formerly.

92. Jackdaw. *Corvus monedula*, Linn.

Abundant and increasing.

93. Raven. *Corvus corax*, Linn.

I do not believe that more than two pairs of ravens breed annually now in Hampshire, and both of these are in the Isle of Wight. One pair at Freshwater, the other on the Culver Cliff. These birds not infrequently bring off their young successfully ; but nevertheless the vacancies of the inland breeding pairs that have now vanished are not taken up. Formerly there were several inland nests, one of the last occupied being that at Avington Park, Alresford, the seat of Sir Charles Shelley, Bart. The nest was situated in a clump of Scotch firs in the park, and was occupied for many years, when unfortunately, the place being let some fifteen years ago, the birds disappeared. A pair also bred in Rooksbury Park near Wickham some thirty-five years ago, and a pair near Winchester about twenty years ago. And doubtless many other pairs have disappeared within the last quarter of a century. I have by no means infrequently seen a pair of ravens in the New Forest, and on one occasion saw four together. It is greatly to be hoped that this splendid bird, which in the extremely small numbers it now is can do no appreciable harm to any one, may long remain a resident in the county.

94. Carrion Crow. *Corvus corone*, Linn.

Somewhat local ; but, notwithstanding constant and deserving persecution, is only too common in some localities.

95. Grey or Hooded Crow. *Corvus cornix*, Linn.

Common winter visitor, particularly to the coast.

96. Rook. *Corvus frugilegus*, Linn.

Common resident.



## BIRDS

97. Skylark. *Alauda arvensis*, Linn.

Abundant resident, receiving enormous additions to its numbers in autumn, and particularly in severe winters.

98. Woodlark. *Alauda arborea*, Linn.

A decidedly scarce and local resident.

99. Shore Lark. *Otocorys alpestris* (Linn.).

Winter visitor in varying numbers, principally near the coast.

100. Swift. *Cypselus apus* (Linn.).

Abundant summer visitor, arriving usually at the end of April, the main body departing about August 15th. A few stragglers remain until about September 1st.

101. Needle-tailed Swift. *Acanthyllis caudacuta* (Latham).

A Needle-tailed Swift was obtained at Ringwood in 1879, having previously been seen flying over the river Avon by Mr. Corbin. It was exhibited by Professor Newton at a meeting of the Zoological Society.

102. Nightjar. *Caprimulgus europæus*, Linn.

A common summer visitor, very partial to heathy districts.

103. Wryneck. *Iynx torquilla*, Linn.

A fairly common spring migrant, arriving often by the end of March.

104. Green Woodpecker. *Gecinus viridis* (Linn.).

This beautiful bird is fortunately common in Hampshire, and might be considered one of its most characteristic birds. It is particularly numerous in the New Forest district, and may frequently be seen far out in the heaths, and away from trees of any description.

105. Great Spotted Woodpecker. *Dendrocopus major* (Linn.).

Generally distributed throughout the county, and although in far fewer numbers than the preceding, is by no means rare when natural conditions are suitable. Is much more given to wandering than the green woodpecker.

106. Lesser Spotted Woodpecker. *Dendrocopus minor* (Linn.).

This woodpecker is really more abundant than the last, although it is popularly supposed to be scarcer. It is usually the most abundant where the two preceding species are scarcest.

107. Kingfisher. *Alcedo ispida*, Linn.

Resident, and to be found on every stream, but considered to be a decreasing species. It has, however, certainly not decreased during the last ten years. There is a strong migration in spring and autumn.

## A HISTORY OF HAMPSHIRE

108. Roller. *Coracias garrulus*, Linn.

An accidental straggler ; one obtained at Allenworth Hinton, Christchurch, 1874 (Hart).

109. Bee Eater. *Merops apiaster*, Linn.

An irregular straggler, May 21st, 1888 (Hart).

110. Hoopoe. *Upupa epops*, Linn.

The Hoopoe may be considered an almost annual spring visitor in small numbers to Hampshire ; and were it not almost invariably shot as soon as seen, would undoubtedly nest regularly in the county. And no greater addition to our birds than this elegant and harmless, not to say most useful, species can well be imagined. It is reported to have bred near Christchurch (Hart). It also occurs in the autumn migration, and I have myself seen it in the New Forest as late as the end of November.

111. Cuckoo. *Cuculus canorus*, Linn.

Abundant summer visitor, the main body arriving about April 12th, but occasionally, as in 1894, the end of March.

112. White or Barn Owl. *Strix flammea*, Linn.

Generally distributed throughout the county, but is decidedly scarce in the New Forest districts. It is greatly to be hoped that this may be an increasing species as its good qualities and absolute harmlessness become recognised by game preservers, gamekeepers, and farmers.

113. Long-eared Owl. *Asio otus* (Linn.).

May be considered locally common ; is partial to fir plantations on the downs and throughout the chalk districts. It is not common in the south of the New Forest, but becomes comparatively so in the north. There is a considerable autumn migration.

114. Short-eared Owl. *Asio accipitrinus* (Pallas).

A winter visitor to the open country ; sometimes in considerable numbers.

115. Tawny Owl. *Syrnium aluco* (Linn.).

Resident in all wooded districts, and is particularly common throughout the New Forest region ; is probably really the most abundant owl in the county. It is very scarce in the Isle of Wight.

116. Little Owl. *Athene noctua* (Scopoli).

The same applies to the Little Owl, of which large numbers have been let out by several gentlemen with the intention of establishing the species. Of course some of these have doubtless bred.

117. Snowy Owl. *Nyctea scandiaca* (Linn.).

Is recorded as having occurred at Burley, in the New Forest, in 1848 (Hart).



## BIRDS

118. Scops Owl. *Scops giu* (Scopoli).

Two are recorded by Hart : one in July, 1866, the other October, 1884 ; both from the New Forest.

119. Eagle Owl. *Bubo ignavus*, T. Forster.

The specimens of eagle owls obtained in this county have almost certainly been enlarged from captivity, either by accident or design.

120. Marsh Harrier. *Circus æruginosus* (Linn.).

Scarce autumn and winter visitor ; formerly resident.

121. Hen Harrier. *Circus cyaneus* (Linn.).

Is reported to have been resident and to have bred in 1874. It is now a scarce but regular winter visitor ; principally adult males.

122. Montagu's Harrier. *Circus cineraceus* (Montagu).

I think there is no doubt but that the Hen Harrier was formerly frequently confounded with this species, and that this bird was at one time comparatively abundant. It is still a regular spring visitor to suitable localities in the county, and where unmolested successfully rears its young ; it has bred in the Isle of Wight. Its food consists almost entirely of meadow pipits and frogs.

123. Common Buzzard. *Buteo vulgaris*, Leach.

The Buzzard is a resident in Hampshire, but in almost vanishing numbers. Accidental migrants appear at intervals, usually in autumn, in many parts of the county and the Isle of Wight. At one time it was no doubt distributed throughout the county, and to within the last quarter of a century several pairs appear to have bred annually within the New Forest area. But egg collecting has done away with this, although the birds themselves may not have been destroyed. The nest of the common buzzard is so easily located, and usually so accessible, that to protect it against a determined collector is almost impossible. Thus the efforts of the birds to continue their race are year after year thwarted. In 1896 a pair hatched and successfully reared two young ones in a Scotch fir tree not far from Knightwood Enclosure ; and it was a great pleasure to any ornithologist to see the two old birds with their young floating overhead during the month of July. There may have been young reared since then, but I am not certain of it. Nests have been built every year. I am informed by Mr. Stares that a pair of buzzards bred in a wood near Titchfield in 1885, and there are records of odd nests from other parts of the county within the last ten years ; but unless something is done to enable this fine and practically harmless bird to occasionally carry off a brood of its young ones, it must become extinct as a breeding species within a comparatively short period. For, as with the great bustard, when once the native race is gone, it is practically impossible to revive a species in a country again.

## A HISTORY OF HAMPSHIRE

124. Rough-legged Buzzard. *Buteo lagopus* (Gmelin).

An irregular autumn visitor.

125. Spotted Eagle. *Aquila maculata* (Gmelin).

A male spotted eagle was shot at Somerley by one of Lord Normanton's keepers, December 28th, 1861 (Howard Saunders).

126. White-tailed Eagle. *Haliaëtus albicilla* (Linn.).

The White-tailed Eagle might be considered almost an annual winter visitor. But few winters pass without one or more occurring. Very often these are shot ; but this is not always the case, for there are landowners who forbid this destruction ; and in the New Forest they are safe. The neighbourhood of Christchurch, the Avon Valley, and the New Forest are favourite haunts, and on several occasions I have had a good inspection of this splendid bird. Although these visitations are almost always in autumn and winter, and are usually confined to immature birds, in July, 1885, I saw a fine adult male rise out a bog on the Wilverley Hills, and after taking one or two circles come over us at a good height, the sun shining through his white tail. I afterwards found out that this eagle roosted most of the summer on the beacon on Hengistbury Head. I saw a white-tailed eagle sitting on the ground in the centre of a large seed-field in December, 1895, close to Micheldever station.

127. Sparrow Hawk. *Accipiter nisus* (Linn.).

Notwithstanding constant persecution, which I am sorry to say it merits, this little robber keeps up its numbers without any apparent diminution. There is a large autumn migration.

128. Kite. *Milvus iclinus*, Savigny.

Is extinct as a breeding species, and one of the rarest stragglers. Stanpit Marsh, 1851 (Hart) ; near Alresford, 1890 (Chalkley).

129. Honey Buzzard. *Pernis apivorus* (Linn.).

The Honey Buzzard is a rare summer visitor to the larger woodlands of the county, and unfortunately might now almost be recorded as accidental, although two or three are 'collected' in most years, generally in autumn. It was, however, until about the year 1879, a regular visitor to the New Forest, and several pairs used commonly to breed there. The value put upon its eggs, £5 being a common price paid for a clutch of two, was too great a temptation to keepers and others who used year after year carefully to mark down the breeding pairs of birds, and when they had laid procure them with their eggs. It is recorded in Howard Saunders's *Manual* that as much as £40 had been given for a pair of old birds with their young. The principal war of extermination was between the years 1860 and 1870. But in the year 1880, when Hon. Gerald Lascelles became Deputy Surveyor, a different state of affairs commenced, and all that could be done was done to preserve the Honey Buzzard and the remainder of the interesting



## BIRDS

inhabitants of the Forest ; for this particular bird it seems to have been too late, and I do not myself know of a single authentic case of its having bred since that date. I have carefully looked out for it year after year, and though I have pretty frequently seen individuals, I have never but once seen one that made me think that there might possibly have been a nest, and that was in July, 1895, when on several occasions I saw one frequenting the same part of the Forest, which invariably took the same flight. The habit of arriving when the leaf is fully out and of frequenting deep woodlands renders this species extremely inconspicuous, and it is only in the early morning and on its first arrival that it is at all inclined to soar or lie on the wing for any length of time. So it may possibly have escaped on a few occasions. A female that had bred was shot by a keeper in Brockenhurst Park in 1887, and Mr. Hart, of Christchurch, assures me that he knew an authentic case of a pair nesting in 1894. It may not even now be too late to preserve this harmless and beautiful bird to the Hampshire fauna, and I commend it to the protection of those who may have it in their power to extend it.

### 130. Peregrine Falcon. *Falco peregrinus*, Tunstall.

The Peregrine Falcon nests annually in the Freshwater cliffs in the Isle of Wight, and attempts to do so most years in the Culver Cliff and occasionally on St. Catherine's Point, though very rarely successful in bringing off its young. On the mainland the Peregrine may often be seen, more frequently during autumn and winter, but occasionally during any month in the year. Contrary to what might be expected, the majority of peregrines seen at all seasons of the year are adult birds, and, except occasionally in the autumn, I have very rarely seen birds in the nestling plumage. In the New Forest this splendid bird is by no means an unusual sight, regularly using certain trees for roosting and certain splashes for bathing. From the numerous 'kills' seen about, wood pigeons are undoubtedly the principal food of this bird inland, but in the river valleys teal and ducks also form a very considerable portion of its quarry. Nearly all the large duck preserves have a peregrine or two attendant upon them all the winter. Contrary to the general opinion, I do not consider the Peregrine at all a rare bird. Next to the kestrel and sparrow hawk it is by far the commonest member of the order Accipitres, and long may it remain so. It is in reality to be seen at intervals everywhere, and the frequency with which one appears when a trained hawk is put on the wing for the first time in a district where such a bird as the peregrine falcon is popularly supposed not to exist is remarkable.

### 131. Hobby. *Falco subbuteo*, Linn.

The Hobby is a regular but somewhat scarce summer visitor to the county, arriving the beginning of May and not usually staying beyond the beginning of September. It appears to have been at one time a fairly common and regular visitor to the New Forest district. This is

## A HISTORY OF HAMPSHIRE

certainly far from being the case now. In fact for many years Hobbies seem to have avoided the Forest ; and I am not aware of a pair having successfully reared their young since 1886, when I saw a brood of flying young ones close to Ipley farm. From other parts of the country it is now more frequently recorded. Lord Baring writes to me that 'the Hobby has been seen in our woods, a good many at times.' Sir Charles Shelley says : 'The Hobby probably breeds at Avington, as a young one was shot here.' It is more frequent in the woods in the neighbourhood of the downs, as it appears to prefer large woodlands situated in a comparatively open country. It is to be hoped that this elegant little falcon may again increase in numbers when its beauty and harmlessness becomes recognized by game preservers and keepers.

### 132. Merlin. *Falco æsalon*, Tunstall.

The Merlin is a regular and by no means uncommon winter visitor to the county, frequenting the open country, and may often be seen chasing larks and pipits on the heaths of the New Forest. I have often watched most interesting flights from the railway, particularly in the neighbourhood of Basingstoke, but the train has invariably passed on before I was able to witness the termination.

### 133. Kestrel. *Falco tinnunculus*, Linn.

The Kestrel is commoner than any other falcon or hawk, is resident, breeds everywhere, and is particularly abundant in the Isle of Wight. There is a large spring and autumn migration.

### 134. Osprey. *Pandion haliaëtus* (Linn.).

The Osprey may be considered a rare but regular spring and autumn migrant to the coasts, estuaries, and occasionally to the inland lakes and rivers of Hampshire. Unfortunately from the ease with which it is shot it very frequently falls a victim.

### 135. Common Cormorant. *Phalacrocorax carbo* (Linn.).

The Cormorant is common on the coast, ascending all the rivers for considerable distances, and also resorting to many inland pieces of water. There is a large breeding colony on the Freshwater cliffs, and it is a bird that has largely increased of late years.

### 136. Shag. *Phalacrocorax graculus* (Linn.).

The Shag is represented, but in far fewer numbers than the foregoing species. According to Mr. Kelsall, some breed at Freshwater.

### 137. Gannet. *Sula bassana* (Linn.).

Occurs at intervals off the coast, and, as elsewhere, is occasionally picked up inland.

### 138. Heron. *Ardea cinerea*, Linn.

The Heron is resident and comparatively common in Hampshire, and there are several heronries, though none of large size. No doubt



## BIRDS

at one time it was far more abundant than at present, but for many years there appears to have been no perceptible increase or diminution in its numbers. Some heronries have been abandoned and some new ones have started into existence. The old heronry at Vinney Ridge in the New Forest, situated in tall beech trees, still exists, but for the last twenty years has only averaged some half-dozen nests. It is reported to have formerly consisted of between thirty and forty. The age of the trees and some having been blown down is probably the cause of this decrease in numbers, as in the Forest the heron has no enemies. A few scattered nests are also built in different parts of the forest. There is also a heronry at Sowley Pond on the Beaulieu estate, built in Scotch fir-trees, 'Here are two distinct groups of nests, the first comprising about eighteen nests, and the second about six' (J. Scott Montagu); one at Somerley, consisting, as the Rev. J. E. Kelsall informs me, of about thirty nests; another at Hinton Admiral, near Christchurch; Mottisfont Abbey, near Romsey, which has contained as many as thirteen nests within the last fifteen years, though this year they have unfortunately been reduced to two or three; Otterbourne, small and recent (Kelsall); Wolmer, two small colonies in Scotch firs, established about 1868.

139. Purple Heron. *Ardea purpurea*, Linn.

Occasional straggler; one June 30th, 1875, Ashley Farm, Stockbridge (Hart).

140. Little Egret. *Ardea garzetta*, Linn.

One, recorded in Yarrell as having been killed by William Lockyer near Christchurch, 1822.

141. Squacco Heron. *Ardea ralloides*, Scopoli.

Several have occurred on migration, both in Hampshire and the Isle of Wight (Howard Saunders).

142. Night Heron. *Nycticorax griseus* (Linn.).

Occasional visitor during summer and autumn.

143. Little Bittern. *Ardetta minuta* (Linn.).

Scarce and irregular summer visitor, but many examples have been obtained.

144. Common Bittern. *Botaurus stellaris* (Linn.).

Usually a winter visitor, occasionally numerous. It has been known to nest within recent years.

145. American Bittern. *Botaurus lentiginosus* (Montagu).

This species from across the Atlantic, but which nevertheless has occurred some thirty times in the British Islands, is recorded from Hampshire by Mr. Howard Saunders.

146. White Stork. *Ciconia alba*, Bechstein.

Scarce accidental visitor.

## A HISTORY OF HAMPSHIRE

147. Spoonbill. *Platalea leucorodia*, Linn.

Occasional spring and autumn visitor.

148. Flamingo. *Phænicopterus roseus*, Pallas.

An adult Flamingo was shot on November 26th, 1883, on the mud banks at the mouth of the Beaulieu river, which it had frequented for about a fortnight. There is every reason to consider it a genuinely wild bird. It is recorded by Lord Henry Scott : *Zoologist*, 1884, p. 338.

149. Glossy Ibis. *Plegadis falcinellus*, Linn.

Formerly seen occasionally ; now very rare. August, 1870 ; September, 1876 (Hart).

150. Grey Lag Goose. *Anser cinereus*, Meyer.

A very scarce winter visitor.

151. White-fronted Goose. *Anser albifrons* (Scopoli).

The most frequent of the grey geese, especially inland.

152. Bean Goose. *Anser segetum* (Gmelin).

Uncertain winter visitor, occasionally passing over in considerable numbers.

153. Pink-footed Goose. *Anser brachyrhynchus*, Baillon.

Occasional winter visitor.

154. Bernacle Goose. *Bernicla leucopsis* (Bechstein).

A rare winter visitor.

155. Brent Goose. *Bernicla brenta* (Pallas).

A regular visitor to the coast, often in great numbers, but apparently not in such vast flocks as formerly. Very rarely comes inland.

156. Whooper Swan. *Cygnus musicus*, Bechstein.

Winter visitor to coast and inland waters, occasionally in considerable numbers during severe weather.

157. Bewick's Swan. *Cygnus bewicki*, Yarrell.

As the whooper, but much more irregular in its visitations.

158. Mute Swan. *Cygnus olor* (Gmelin).

The Mute Swan is common throughout the county, and appears as a wild bird ; but almost undoubtedly these all belong to private swanaries, such as that on the Beaulieu river, or are visitors from Abbotsbury in Dorsetshire.

159. Common Sheld Duck. *Tadorna cornuta* (S. G. Gmelin).

This handsome bird is resident on the coast in very limited numbers, and breeds at the mouth of the Beaulieu river and near Christchurch. There is often a considerable number on the Solent in winter.



## BIRDS

160. Ruddy Sheldrake. *Tadorna casarca* (Linn.).

The Ruddy Sheldrake is a very rare and uncertain visitor, and in all probability those obtained in this county, as elsewhere, have generally been birds that were bred in private waters, and being unpinioned have flown away. In 1892, however, there appears to have been a migration to this country, and in fact most parts of north-western Europe, owing to severe drought in the south-east; so a bird seen at Burley in the New Forest that year was probably genuinely wild.

161. Mallard, or Wild Duck. *Anas boscas*, Linn.

Abundant and resident, receiving large migratory additions to its numbers in winter; owing to careful preservation has largely increased as a breeding species of late years.

162. Gadwall. *Anas strepera*, Linn.

The Gadwall is a scarce winter visitor. Breeds occasionally at Beaulieu (J. Scott Montagu).

163. Shoveler. *Spatula clypeata* (Linn.).

The Shoveler is a winter visitor in varying numbers to all parts of the county, particularly the inland waters, but is always scarce. A few pairs have remained to breed of late years. Mr. Hart says since 1866 it has been one of the ducks that are breeding in increasing numbers throughout the country.

164. Pintail. *Dafila acuta* (Linn.).

A winter visitor, usually in small numbers. Has bred at Beaulieu (J. Scott Montagu).

165. Teal. *Nettion crecca* (Linn.).

The Teal is a resident, and breeds in small numbers throughout the county, but principally in the New Forest region. It receives large additions to its numbers in winter, and in fact Hampshire may be considered a favoured county by this beautiful and sporting little duck. Large bags of teal are killed in some private waters.

166. American Green-winged Teal. *Nettion carolinense* (Gmelin).

An example of this rare American straggler was killed about 1840 at Hurstbourne Park by Mr. Fellowes, and is considered by Mr. Howard Saunders as being genuine.

167. Garganey. *Querquedula circia* (Linn.).

Summer visitor in very small numbers, and recorded by Mr. Hart as breeding. It will probably increase in numbers as a breeding species. Mr. J. Stares records that a pair reared their young near Fareham in 1897.

168. Wigeon. *Mareca penelope* (Linn.).

A numerous winter visitor, often in vast numbers, frequenting both the coast and inland rivers and lakes.

## A HISTORY OF HAMPSHIRE

169. Red-crested Pochard. *Matta rufina* (Pallas).

A specimen of this southern bird is recorded by Mr. Hart as having been killed by Tram Hiscock at Christchurch, 1820.

170. Common Pochard. *Fuligula ferina* (Linn.).

A winter visitor, some remaining to breed. An increasing species in Hants, as elsewhere. Hon. A. Baring, from Alresford, records it as now a regular visitor, often in considerable numbers; and Mr. Hart as breeding regularly since 1880 in the neighbourhood of Christchurch. I have seen large flocks on Fleet Pond.

171. Tufted Duck. *Fuligula cristata* (Leach).

Is a common winter visitor, and is another duck that is extending its breeding range in the British Islands. Hon. A. Baring writes from Alresford that 'the Tufted Duck is common here all the winter, but disappears with the spring; the birds which breed not generally appearing before May. Owing doubtless to their breeding so late, I notice that they generally rear very good broods.' They have bred at Alresford since 1890, and have increased in numbers. Sir Charles Shelley writes that the Tufted Duck breeds regularly at Avington. Mr. Stares records a pair nesting near Fareham in 1893, and no doubt they nest on other inland waters.

172. Scaup Duck. *Fuligula marila* (Linn.).

A regular winter visitor, principally to the coast.

173. Golden Eye. *Clangula glaucion* (Linn.).

A winter visitor, immature birds largely predominating.

174. Long-tailed Duck. *Harelda glacialis* (Linn.).

A rare winter visitor.

175. Eider Duck. *Somateria mollissima* (Linn.).

Very scarce winter visitor.

176. Common Scoter. *Ædemia nigra* (Linn.).

Abundant on the coast in winter, and a certain number of non-breeding birds may be seen throughout the summer.

177. Velvet Scoter. *Ædemia fusca* (Linn.).

Rather scarce winter visitor.

178. Goosander. *Mergus merganser*, Linn.

A regular winter visitor in small numbers, with a marked preference for fresh water. Adult males are rather scarce, I have on several occasions seen females on Hatchett Pond on Beaulieu Heath.

179. Red-breasted Merganser. *Mergus serrator*, Linn.

More numerous than the last, but prefers the sea and tidal estuaries. A winter visitor, but I have seen non-breeding birds in summer.



## BIRDS

180. Smew. *Mergus albellus*, Linn.

Irregular winter visitor, preferring fresh water.

181. Hooded Merganser. *Mergus cucullatus* (Linn.).

One is recorded by Mr. Hart as having been killed by Aaron Chief in the winter of 1854.

182. Wood Pigeon. *Columba palumbus*, Linn.

Abundant resident, receiving immense addition to its numbers in winter, particularly in those that have succeeded a great fall of acorns and beech mast. A greatly increasing species.

183. Stock Dove. *Columba ænas*, Linn.

Although far less numerous than the last, the Stock Dove is abundant, and has greatly increased of late years. Numbers breed in the cliffs of the Isle of Wight.

184. Rock Dove. *Columba livia*, Gmelin.

A pair or two of Rock Doves are reported to breed in the cliffs of the Isle of Wight, but these are most likely escapes. In fact I had a small flock of pure wild birds, reared from parents taken in the caves of Co. Kerry, and these used to flight from my house near Lymington right away in the direction of the island, and eventually they all disappeared.

185. Turtle Dove. *Turtur communis*, Selby.

A common summer visitor, arriving in the end of April and in the beginning of May, and remaining until the end of September.

186. Pallas's Sand Grouse. *Syrrhaptes paradoxus* (Pallas).

During the remarkable immigration of this bird in 1888, the first individuals were noticed near Itchen Stokes, Hants, on May 5th, after which date they became pretty general throughout the county. A few remained until May, 1889.

187. Black Grouse. *Tetrao tetrix*, Linn.

The Black Grouse is indigenous in Hampshire, and formerly frequented all suitable localities. It is now confined to certain parts of the New Forest district; while the very few that still frequent Wolmer Forest are the result of re-introduction. Formerly blackgame might be considered to have been common, and several holders of New Forest licenses who used to go after them from thirty to forty years ago have told me of the numbers they used to see, and more than one has mentioned that he has shot as many as seven cocks in a day. It is however of the last nineteen years only that I can write from my own experience. In 1881 blackgame were distributed generally throughout all suitable parts of the Forest. They abounded most in the northern portions, but there was a good stock on the Ipley river, Dibden Bottom, and Hilltop Heath, from whence they extended into Beaulieu Manor. On Beaulieu Heath there was a fair sprinkling, and I have seen as many as sixteen birds perched on the

## A HISTORY OF HAMPSHIRE

thorn bushes of Crockford Pits close to the road. There was a small colony on Ober Heath and in Rhinefield, and a few might generally be seen in the neighbourhoods of Hinchleslea, Setthorns, Wilverley, Thorny Hills and Burley. The greatest number I ever saw together was on their 'curling' ground on Ocknell plain, on April 18th, 1882, about 3.30 a.m., when there were at least forty birds, nearly all cocks, congregated on quite a small space.<sup>1</sup> (Here it may be as well to mention that the places chosen by the blackcocks for showing off to the females in spring is known in the New Forest as their 'curling ground.') Up to 1880, blackcocks were allowed to be shot by the Forest licensees, but hens had always been spared. In that year when the Hon. Gerald Lascelles was appointed deputy surveyor he determined to do all that was possible to increase the stock, which had been rapidly diminishing for the past ten years, and the killing of cocks was prohibited. A number of Scotch blackgame were introduced, and for three or four years blackgame did well and increased everywhere, but then they began to decrease rapidly owing to various causes, the first of which was overstocking the Forest with numbers of hand-reared foxes, and the letting of various shootings which had been much frequented by the Forest blackgame. The shooting tenant of Ipley farm and Ferny Crofts, who also held a Forest license, nearly exterminated the stock in that district, and the Cadland keepers, who had a right of shooting in the Bishop's Purlieu, killed off the nice little stock there (1883), under the guidance of a Scotch keeper who did not know the English close time, and brought his party on August 19th! Then an epidemic similar to the grouse disease attacked them and carried off numbers, principally the young cocks. And so, notwithstanding every care that could be taken by the authorities, the birds gradually dwindled away from the south and east of the Forest, so that in 1893 scarcely a bird could be found all through that large district. Since then much has been done in turning out birds, and some have been reared under hens; but they are difficult to procure in sufficient numbers and in good enough condition to make any appreciable difference. The stock now is almost entirely confined to the northern portions of the Forest, and it is hard to estimate their numbers, but they are unfortunately few. Two or three broods at least are reared in a year, perhaps more, so there is a possibility of the stock being revived again, and it is ardently hoped that it may be.

Mr. Hart writes to me that a few blackgame remain on the Heron Court estate, but that it is but a small remnant of what were there formerly.

188. Pheasant. *Phasianus colchicus*, Linn.

The Pheasant abounds throughout Hampshire, where some of the largest preserves in the country are situated. Of late years they have greatly increased in the New Forest.

<sup>1</sup> Mr. Lascelles saw twenty-three cocks together on Ridley Plain.



## BIRDS

189. Partridge. *Perdix cinerea*, Latham.

The same applies to the Partridge, which, since the prevalence of 'driving,' has also largely increased. Some of the best partridge manors in the kingdom exist in this county, which up to the present time enjoys the reputation of having produced the 'record' bags.

190. Red-legged Partridge. *Caccabis rufa* (Linn.).

This introduced species is distributed throughout the county, and is locally abundant. It now frequents the wildest heaths of the New Forest district. In the Isle of Wight it is reported as a rare straggler.

191. Quail. *Coturnix communis*, Bonnaterre.

The Quail is a rather scarce summer visitor, and has apparently greatly reduced in numbers of late years. Some seasons a good many pairs breed in the principal corn-growing districts in the centre of the county. It occasionally occurs in winter.

192. Landrail. *Crex pratensis*, Bechstein.

A regular summer visitor, breeding, and leaving, as a rule, in September; but it occurs at all seasons of the year.

193. Spotted Crake. *Porzana maruetta* (Leach).

A rather rare and very local summer visitor. It is fairly common in the Avon valleys. Occasionally occurs in winter.

194. Little Crake. *Porzana parva* (Scopoli).

Is a rare visitor, but several have been obtained in the county. As with all its kind, is exceedingly likely to be overlooked.

195. Baillon's Crake. *Porzana bailloni* (Vieillot).

Mr. Hart reports three occurrences of this bird.

196. Water-rail. *Rallus aquaticus*, Linn.

Is a resident, but most abundant in autumn and winter, when it may be found frequenting every spring, wooded stream, and even the open bogs in the wildest heaths.

197. Moor Hen. *Gallinula chloropus* (Linn.).

Most abundant resident.

198. Coot. *Fulica atra*, Linn.

A common resident in suitable localities, and an abundant winter migrant.

199. Crane. *Grus communis*, Bechstein.

One is recorded from Christchurch, 1852 (Hart).

200. Great Bustard. *Otis tarda*, Linn.

Now a very rare accidental visitor, the last recorded having been killed near Romsey, 1891.

## A HISTORY OF HAMPSHIRE

201. Little Bustard. *Otis tetrax*, Linn.

One is recorded by Mr. John Cowper as having been killed at Arreton, in the Isle of Wight, and has most likely occurred on the mainland. Almost always a winter visitor.

202. Stone Curlew. *Ædicnemus scolopax* (S. G. Gmelin).

The Stone Curlew is a summer visitor to all the chalk uplands of the county, and breeds regularly, and in some districts with which I am best acquainted undoubtedly in increasing numbers. It occasionally remains throughout the winter, and I have a specimen picked up under the telegraph wires near my house during the severe frost of 1895. It was in good condition. From the Isle of Wight it is reported as being a winter visitor, although occasionally coming to breed.

203. Collared Pratincole. *Glareola pratincola*, Linn.

A rare straggler. One killed at Barton, near Christchurch, by Lieut. Henn, 1857 (Hart).

204. Cream-coloured Courser. *Cursorius gallicus* (Gmelin).

One recorded as having been killed at Sopley, 1845, by a shepherd in employ of Mr. W. Tree (Hart).

205. Dotterel. *Eudromias morinellus* (Linn).

Is a rare spring and autumn migrant to the down district, and occasionally occurs in the Isle of Wight.

206. Ringed Plover. *Ægialitis biaticula* (Linn).

Common resident, breeding on the shore in numbers; in a few localities some breed inland.

207. Little Ringed Plover. *Ægialitis curonica* (Gmelin).

A very rare visitor. One, April 28th, 1879 (H. Preston), and another from the Seebohm collection, Freshwater, Isle of Wight, August, 1864.

208. Kentish Plover. *Ægialitis cantiana* (Latham).

A scarce straggler in spring and summer.

209. Golden Plover. *Charadrius plumialis*, Linn.

The Golden Plover is a regular autumn and winter visitor, often in large numbers, to all suitable parts of the county, and in the New Forest frequents certain places on the heaths with great regularity.

210. Grey Plover. *Squatarola helvetica* (Linn.).

A rather common visitor to the coast in spring and autumn. I have seen considerable numbers on the shores of Hatchett Pond, Beaulieu Heath.

211. Lapwing, or Peewit. *Vanellus vulgaris*, Bechstein.

Abundant resident, breeding almost everywhere, while enormous



## BIRDS

additions to its numbers arrive in early autumn. Notwithstanding that its eggs are so systematically robbed, there is no doubt but that this species has greatly increased in this county, as it undoubtedly has throughout the kingdom. Its habits have altered, for although formerly it only bred in certain favoured localities, it now will nest in almost any field.

212. Turnstone. *Streptilas interpres* (Linn.).

Fairly common autumn and spring visitor to the coast.

213. Oyster Catcher. *Hæmatopus ostralegus*, Linn.

Not uncommon on the coast in spring and autumn, and a resident in small numbers.

214. Avocet. *Recurvirostra avocetta*, Linn.

Is a rare accidental visitor.

215. Black-winged Stilt. *Himantopus candidus*, Bonnaterre.

A rare visitor. Amongst other records, one killed by Captain Henry Arnott, Mudeford, Christchurch, about 1840.

216. Grey Phalarope. *Phalaropus fulicarius* (Linn.).

An irregular autumn visitant; numerous in some years, notably 1865, 1866, 1870, 1872, 1875, 1886, 1891. It occurs inland as well as on the coast and is always remarkably tame.

217. Woodcock. *Scolopax rusticula*, Linn.

The Woodcock is a resident, and very considerable numbers breed in the New Forest region and in suitable districts throughout the county. There can be no doubt but that the Woodcock as a breeding species has largely increased in numbers in this county as it has throughout the kingdom, the reason being that the woods are kept perfectly quiet in spring, the breeding birds not being shot by parties of rabbit shooters in March and April, as was formerly the case. Few birds nest earlier than the Woodcock, and I saw well feathered young ones on April 13th, 1894, which allowing for the twenty-two days of incubation, four days for the laying of the clutch of eggs, and the young being at least a fortnight old, means that that pair must have begun to nest fairly early in February. During the extreme heat and drought of the last few summers many young Woodcocks have perished from want of food and water, and have been picked up, dead and dying, in most unlikely places, such as by the leak from a well in a cottage garden, and by a tap in a railway station. But although as a breeding species the Woodcock more than maintains its numbers, as an autumn migrant the reverse is the case. There has been no good woodcock year since 1895, and in some seasons the numbers have been extremely small. The best bag of woodcocks of late years with which I am acquainted in the county was eighty-eight in three days in two enclosures of the New Forest—King's Garne and Sloden—in January, 1886. About sixty birds was a

## A HISTORY OF HAMPSHIRE

fair bag for the holder of a Forest license to kill in the season to his own gun.

218. Great Snipe. *Gallinago major* (Gmelin).

A scarce autumn visitor. Occasionally occurring as early as August. Usually frequenting perfectly dry localities.

219. Common Snipe. *Gallinago cælestis* (Frenzel).

As a resident the Snipe is at least as numerous as it has ever been of late years, and many certainly breed in localities where twenty years ago they were practically unknown to do so. But as a migrant it is in the same case as the woodcock, and the number of snipe now to be found on all but the very best ground is far fewer than formerly. The variety known as Sabine's Snipe has been obtained several times in the county.

220. Jack Snipe. *Gallinago gallinula* (Linn.).

The Jack Snipe is a regular and fairly common autumn and winter visitor, the first arrivals coming in September, and a few remaining until May; but there is not a single authenticated instance of its having bred in the British Isles.

221. Dunlin. *Tringa alpina*, Linn.

A very common autumn and winter visitor to the coast, and I have seen small flocks frequenting the shores of certain inland waters in stormy weather.

222. Little Stint. *Tringa minuta*, Leisler.

Is a rare visitor on migration.

223. Temminck's Stint. *Tringa temmincki*, Leisler.

A very rare straggler on migration. Three occurrences recorded by Hart.

224. Curlew Sandpiper. *Tringa subarquata* (Güldenstädt).

Fairly common in autumn and spring.

225. Purple Sandpiper. *Tringa striata*, Linn.

A winter visitor, and never numerous; is always remarkably tame.

226. Knot. *Tringa canutus*, Linn.

Common in autumn and winter on the coast, and although a most strictly marine species, I have often seen small flocks on Hatchett Pond in the New Forest.

227. Sanderling. *Calidris arenaria* (Linn.).

Is common on the coast from autumn to spring, frequently consorting with dunlins.

228. Ruff (♀ Reeve). *Machetes pugnax* (Linn.).

Ruffs and Reeves occur in autumn occasionally. They are very rare on the spring migration.



## BIRDS

229. Common Sandpiper. *Totanus hypoleucus* (Linn.).

Regular spring and autumn visitor, principally to fresh water, but a few pairs remain and breed in suitable localities. I have seen an old pair with young ones on the river above Lymington, and it is recorded by Mr. Cowper as nesting at Bembridge, Isle of Wight, every year.

230. Wood Sandpiper. *Totanus glareola* (Gmelin).

A scarce autumn migrant.

231. Green Sandpiper. *Totanus ochropus* (Linn.).

A regular migrant in spring and autumn, frequenting fresh water, and to be seen by the sides of ponds or streams in almost every month of the year, although there is no recorded instance of its having bred in Britain.

232. Redshank. *Totanus calidris* (Linn.).

A resident, breeding in suitable marshes and meadows throughout the county. Common on migration on the coast. Breeds also in the Isle of Wight.

233. Spotted Redshank. *Totanus fuscus* (Linn.).

A few occur on migration.

234. Greenshank. *Totanus canescens* (Gmelin).

Not uncommon on migration. Occurring inland as well as on the coast.

235. Bar-tailed Godwit. *Limosa lapponica* (Linn.).

Spring and autumn visitor.

236. Black-tailed Godwit. *Limosa belgica* (Gmelin).

Spring and autumn migrant. Most frequent in spring.

237. Curlew. *Numenius arquata* (Linn.).

A resident. A few pairs breed in the New Forest and its adjacent heathlands. Very numerous on the coast from September onwards throughout the winter, many non-breeding birds spending the summer there.

238. Whimbrel. *Numenius phæopus* (Linn.).

Autumn and spring visitor, especially common at the latter season.

239. Black Tern. *Hydrochelidon nigra* (Linn.).

An autumn visitant. Formerly used to occur in spring, but now rarely seen at that period (Hart).

240. White-winged Black Tern. *Hydrochelidon leucoptera* (Schinz.).

A rare visitor in early summer.

241. Whiskered Tern. *Hydrochelidon hybrida* (Pallas).

Very rare summer straggler. June, 1875 (Hart).

## A HISTORY OF HAMPSHIRE

242. Gull-billed Tern. *Sterna anglica*, Montagu.

One specimen is recorded as having occurred in the county (Howard Saunders).

243. Caspian Tern. *Sterna caspia*, Pallas.

A rare straggler. A specimen was shot by Hon. Grantley F. Berkeley, at High Cliff, Mudeford, in the early autumn of 1852.

244. Sandwich Tern. *Sterna cantiaca*, Gmelin.

Scarce summer visitor, principally on migration.

245. Common Tern. *Sterna fluviatilis*, Naumann.

Regular summer visitor. The most numerous tern.

246. Arctic Tern. *Sterna macrura*, Naumann.

Regular summer visitor.

247. Little Tern. *Sterna minuta*, Linn.

A summer visitor in not very large numbers.

248. Sabine's Gull. *Xema sabinii* (J. Sabine).

This rare gull has occurred on the Hampshire coast, and a mature example in summer plumage (one of the six recorded by Mr. Howard Saunders) was obtained off Bournemouth.

249. Little Gull. *Larus minutus*, Pallas.

Irregular winter visitant.

250. Brown-headed Gull. *Larus ridibundus*, Linn.

Abundant resident, although not at present nesting in the county.

251. Common Gull. *Larus canus*, Linn.

A common winter visitor.

252. Herring Gull. *Larus argentatus*, Gmelin.

Abundant resident, breeding in numbers on the cliffs of the Isle of Wight.

253. Lesser Black-backed Gull. *Larus fuscus*, Linn.

Common in winter, and immature birds may be seen throughout the year. Is reported as breeding regularly on the Culver Cliff and at Freshwater, Isle of Wight.

254. Greater Black-backed Gull. *Larus marinus*, Linn.

Winter visitor, not common in adult plumage.

255. Glaucus Gull. *Larus glaucus*, Fabricius.

Scarce winter visitant.

256. Iceland Gull. *Larus leucopterus*, Faber.

More irregular than the last.



## BIRDS

257. Kittiwake. *Rissa tridactyla* (Linn.).

Common in winter. Reported to have bred formerly in the Isle of Wight.

258. Great Skua. *Megalestris catarrhactes* (Linn.).

A very scarce winter visitor.

259. Pomatorhine Skua. *Stercorarius pomatorhinus* (Temminck).

Irregular winter visitant.

260. Arctic or Richardson's Skua. *Stercorarius crepidatus* (Gmelin).

Winter visitor.

261. Longtailed or Buffon's Skua. *Stercorarius parasiticus* (Linn.).

Occurs irregularly.

262. Razorbill. *Alca torda*, Linn.

Common resident, breeding on the cliffs of the Isle of Wight.

263. Common Guillemot. *Uria troile* (Linn.).

Very common resident, breeding on the Culver Cliff and Freshwater cliffs.

264. Black Guillemot. *Uria grylle* (Linn.).

Occasional winter visitor.

265. Little Auk. *Mergulus alle* (Linn.).

Irregular visitor, generally in winter, and sometimes in considerable numbers ; is sometimes picked up inland.

266. Puffin. *Fratercula arctica* (Linn.).

A summer visitor in considerable numbers, breeding in Freshwater cliffs. A few occasionally seen in winter.

267. Great Northern Diver. *Colymbus glacialis*, Linn.

A winter visitor from October to March. Very rarely obtained except in winter plumage.

268. Black-throated Diver. *Colymbus arcticus*, Linn.

Does not occur so frequently as the last-named. Has occurred in summer (Hart).

269. Red-throated Diver. *Colymbus septentrionalis*, Linn.

Common from August to May.

270. Great Crested Grebe. *Podiceps cristatus* (Linn.).

Resident, wintering on the coast. As elsewhere in England the increase of this beautiful bird as a breeding species during the last decade is remarkable. It now breeds regularly and in some numbers on almost every suitable piece of water throughout the county, on all of which it is carefully protected, and travellers by the South-Western Railway may enjoy the pleasure of seeing it close to the line on Fleet Pond.

## A HISTORY OF HAMPSHIRE

271. Red-necked Grebe. *Podiceps griseigena* (Boddaert).

A rather scarce winter visitor.

272. Slavonian Grebe. *Podiceps auritus* (Linn.).

Regular winter visitor in small numbers.

273. Eared Grebe. *Podiceps nigricollis* (Brehm.).

Irregular winter and spring visitor.

274. Little Grebe. *Podiceps fluvialis* (Tunstall).

Common resident, breeding in all suitable localities.

275. Storm Petrel. *Procellaria pelagica*, Linn.

Irregular at all seasons, but appearing principally after autumnal gales.

276. Leach's Fork-tailed Petrel. *Oceanodroma leucorhoa* (Vieillot).

A straggler in stormy weather, occasionally common, and many are picked up exhausted inland.

277. Wilson's Petrel. *Oceanites oceanicus* (Kuhl.).

Two examples of this remarkable long-legged petrel have been picked up at Freshwater, Isle of Wight (Howard Saunders).

278. Great Shearwater. *Puffinus gravis* (O'Reilly).

Occasional winter visitor off the coast.

279. Manx Shearwater. *Puffinus anglorum* (Temminck).

An autumn visitor to Christchurch bay (Hart).

280. Fulmar. *Fulmarus glacialis* (Linn.).

Rare winter visitor.



# MAMMALS

## CHEIROPTERA

### 1. Greater Horse-shoe Bat. *Rhinolophus ferrum-equinum*, Schreber.

The records of this bat as at present obtainable go to show that it is very restricted in its British range. Although its very singular appearance prevents any doubt as to its identity on a near view, it is not so easily distinguished on the wing, and may often have been mistaken for the Great Bat. It however occurs in some numbers in the Isle of Wight,<sup>1</sup> and more rarely in Hampshire. Mr. Hart has obtained several specimens in the neighbourhood of Christchurch.<sup>2</sup>

I am not personally familiar with the appearance of this bat when flying. Mr. J. E. Harting says that on the wing it 'appears as large as a noctule, equalling that species in expanse of wing, but to a practised eye it is distinguishable by the proportionately greater width of the flying membrane.' (*Zool.* 3rd ser. 2.)

### 2. Lesser Horse-shoe Bat. *Rhinolophus hipposiderus*, Bechstein.

The Lesser Horse-shoe Bat is less restricted in range than the former species. In Hampshire it is extremely rare. Mr. Hart tells me he has only taken it once near Christchurch, namely in July, 1899.

### 3. Long-eared Bat. *Plecotus auritus*, Linn.

This bat appears to be pretty generally distributed in Hants and the Isle of Wight, but the fact of its being a species which prefers open districts doubtless accounts for its being less known in the New Forest than in other parts of the county.

### 4. Barbastelle. *Barbastella barbastellus*, Schreber.

Bell—*Barbastellus daubentonii*.

This rare species has been obtained in Hampshire by Mr. Hart, and in May of this year, 1900, two were brought to the Rev. J. E. Kellsall, captured in the village of Milton, near Lymington. One of these, which I had an opportunity of examining, was forwarded by him to the British Museum of Natural History. This bat may at once be recognised by its black colour.

### 5. Serotine. *Vespertilio serotinus*, Schreber.

Bell—*Scotophilus serotinus*.

The late Lord Lilford received specimens of this bat from Hamp-

<sup>1</sup> A. G. More, in Venable's *Guide to Isle of Wight*.

<sup>2</sup> He writes: 'The Greater Horse-shoe Bat is comparatively common in the neighbourhood, especially from the old Priory Church. I have taken some thirty individuals in all. Dates: Oct. 30, 1883; Aug. 23, 1887; May 16, 1889; Sept. 10, 1896.'

## A HISTORY OF HAMPSHIRE

shire, as mentioned in a letter by him to the *Zoologist* (3rd ser. xi. 65), and it has been recorded from this county on several other occasions.

### 6. Great or White's Bat. *Pipistrella noctula*, Schreber.

Bell—*Scotophilus noctula*. White—*Vespertilio altivolans*.

To Hampshire belongs the honour of the first description of the habits of this bat as a British species, at the hands of Gilbert White, who devotes part of Letter xxvi. and the whole of Letter xxxvi., written in 1771, to an excellent account of two specimens which he caught.

This fine bat is, with the exception of the Pipistrelle, perhaps the least crepuscular of all our British bats. It comes out very early in the evening, commonly in broad daylight, and therefore its popular name of noctule is a misnomer. Schreber took the specific name *noctula* from *la noctule* of Daubenton. And although 'noctule,' because of the ring in the word, is so familiar that it will never die out, I have thought it well to do honour here to Hampshire by giving the name of Hampshire's great naturalist to the bat 'which I call,' says White, '*Vespertilio altivolans*.'<sup>1</sup> This was a quite appropriate designation, for this bat is truly a high-flier. It may be seen flying about the tops of tall trees and taking the smaller cockchafer, and the snap of its jaws upon the hard wing-cases of that insect can be distinctly heard.

This bat is sporadic in its appearances in some districts, although in others it seems to be a constant resident; but the subject of the migration or congregational movements of bats (or of certain species of bats) is one which still demands much enquiry. In the New Forest White's Bat appears about June, and is generally distributed in suitable localities throughout Hants.

### 7. Pipistrelle. *Pipistrellus pipistrellus*, Schreber.

Bell—*Scotophilus pipistrellus*.

This little bat is too generally distributed and too familiar to need more than a passing notice here. It may frequently be seen on the wing in the broad sunlight in the middle of the day; probably in a majority of cases these individuals are females who have young to rear. The Pipistrelle is also a very light winter sleeper; a warmer day than usual will call it out even in the depth of winter.

### 8. Bechstein's Bat. *Myotis bechsteini*, Leisler.

Bell—*Vespertilio bechsteini*.

In the British Museum are specimens of this very rare bat taken many years ago 'by Mr. Millard in the New Forest' (Bell, p. 52). Mr. E. W. H. Blagg states that in July, 1886, he also took two specimens in the New Forest, 'They were living in a hole made by a woodpecker; there were several more of them, probably about a dozen altogether.' (*Zool.* 3rd ser. xii. 260.)

<sup>1</sup> The name 'White's Bat' is the more becoming since not only was White the first describer in Britain of the bat, but his account was actually written four years before Schreber's *Säugethiere* appeared.



## MAMMALS

### 9. Natterer's Bat. *Myotis nattereri*, Leisler.

Bell—*Vespertilio nattereri*.

Mr. J. E. Harting well remarks that the name *Reddish-grey Bat* was not very happily bestowed by Bell upon this species, 'the dorsal surface of the specimens obtained by us being very pale yellowish grey, and the under parts nearly white' (*Zool.* 3rd ser. xii. 242). Specimens of this bat which I have examined have all conformed with this description. Natterer's Bat has been recorded from various places in Hampshire: for example, Christchurch (Hart), Brockenhurst (Bond), Hamble (Kelsall), Selborne (Bell), and from the Isle of Wight at Ventnor (Hadfield), and Bonchurch (Bury, More, Bond and Borrer). This bat, though it is usually described as resident in holes in trees, also affects buildings, as is evident from the record of its occurrence. I have never had a living Natterer's Bat in my hand, but my friend Mr. O. V. Aplin, who has, says (*Zool.* 3rd ser. xiii. 382): 'The disposition of Natterer's Bat is rather fierce, and having bitten, it retains its grip with the tenacity of a bull-dog. Having fastened on my finger, and been lifted up by it, on one occasion, it hung suspended by its teeth for fully a minute.'

### 10. Daubenton's Bat. *Myotis daubentoni*, Leisler.

Bell—*Vespertilio daubentonii*.

Although this bat has been commonly regarded as very local, this is probably due to want of observation; its northerly range appears to be somewhat restricted, but in the midland and southern counties it is certainly far from uncommon. In Hampshire the writer has seen them flying over the Fleet Pond, and over various streams in the New Forest. Mr. Borrer some years ago found a great colony of these bats in the church at Christchurch. The habits and flight of Daubenton's Bat are so characteristic that it cannot well be mistaken on the wing for any other species. It haunts water, and fly-fishing has therefore given me many opportunities for watching it. According to my observation it does not commonly come out over the open places until it is nearly dark. A little earlier it may be seen moving shadow-like in places darkened by overhanging trees, and soon after the fisherman for the safety of his cast has moved to open water, Daubenton's Bat begins to follow him thither. Late one evening when fishing as a boy for chub on the River Eden in Kent, I hooked a bat belonging I believe to this species which proved afterwards to be abundant there. This bat flies rather slowly with a straight backward and forward flight and rapidly vibrating wings quite close to the water, and seems every now and then to pick an insect off the surface.

Usually a rock and building resident. In captivity this is a mild-mannered bat, not biting as some of the others do.

## A HISTORY OF HAMPSHIRE

11. Whiskered Bat. *Myotis mystacinus*, Leisler.

Bell—*Vespertilio mystacinus*.

In the *British Museum Catalogue* of Cheiroptera, examples of this bat are mentioned by Dobson from the Isle of Wight. It has also been obtained at Christchurch (Hart). It is always spoken of as a local bat, but is so easily mistaken for the Pipistrelle by a casual observer that it is quite possible it has often been overlooked.

### INSECTIVORA

12. Hedgehog. *Erinaceus europæus*, Linn.

Generally distributed.

13. Mole. *Talpa europæa*, Linn.

Abundant.

14. Common Shrew. *Sorex araneus*, Linn.

Universally distributed.

15. Pigmy Shrew. *Sorex minutus*, Linn.

Bell—*Sorex pygmæus*.

This, the smallest British mammal [and one which, unlike the preceding species, is known in Ireland], has been found in the New Forest district by Mr. W. E. de Winton, and Mr. Oldfield Thomas has obtained a specimen at Alum Bay, Isle of Wight. It is probably more generally distributed in England than the preceding species.

16. Water Shrew. *Neomys fodiens*, Pallas.

Bell—*Crossopus fodiens*.

The Water Shrew appears to be generally distributed throughout the county, and is found in every stream in the New Forest.

### CARNIVORA

17. Fox. *Canis vulpes*, Linn.

Bell—*Vulpes vulgaris*.

As in other counties.

18. Pine Marten. *Mustela martes*, Linn.

Bell—*Martes abietum*.

I have been unable to obtain any reference in gamekeepers' accounts to the Pine Marten as having ever been known even in the New Forest district of the County; but it should be remarked that the consensus of available evidence goes to show that it never was an animal of the southern counties. Two specimens only are in existence which have been recorded from time to time as Hampshire examples; one is in the possession of the Rev. R. E. Harrisson, Rector of Droxford, and the other is in the Museum at Alton.

The following, kindly sent me by Mr. Harrisson, contains all the



## MAMMALS

information I have been able to gain about the former example. He writes, under date 12th May, 1900: 'A man named Pinnick was a carpenter on the estate of Mr. A. Drummond when I was a young curate at Fawley, many years ago. He used to stuff birds, etc., and I bought of him, about fifty-four years ago, the Pine Marten to which you allude. I believe he told me that the marten was taken in the Cadland grounds, but whether it was shot or trapped I do not remember.'

Of the other specimen, Mr. W. Curtis, director of the Alton Museum, kindly sends me the following note under date 18th May, 1900: 'An old keeper, living at Hackwood Park, near Basingstoke, died in 1858, and I attended the sale of his little museum and bought this marten, which I understood had been killed by him either on the estate, or the next village, Herriard.'

### 19. Polecat. *Putorius putorius*, Linn.

Bell—*Mustela putorius*.

Although the Polecat has been unknown in Hampshire for many years, and there are practically no local traditions or records of it, a single remark by Gilbert White seems to show it was well known in his day. 'Some intelligent country people,' he writes (Letter xv.), 'have a notion that we have in these parts a species of the genus *mustelinum*, besides the weasel, stoat, ferret, and polecat.' Mr. W. Curtis, director of the Alton Museum, writes in the same letter as above: 'We have a specimen of the Polecat, killed at Monk Wood in this neighbourhood many years ago when I was a boy.'

### 20. Stoat. *Mustela erminea*, Linn.

Abundant.

### 21. Weasel. *Putorius nivalis*, Linn.

Bell—*Mustela vulgaris*.

Abundant.

### 22. Badger. *Meles meles*, Linn.

Bell—*Meles taxus*.

Badgers are found in many parts of the county, and are common enough almost all over the New Forest. Some of the 'buries,' or colonies, are of great age and enormous extent, and must have been inhabited by scores of generations of badgers. In the last twenty years, during which period at the least all birds and animals have been strictly protected and preserved all over the Forest, they have increased considerably; and new and smaller burrows have been started in many fresh places. From the habits of these animals little is seen of them, and their presence is hardly suspected by casual visitors.<sup>1</sup>

### 23. Otter. *Lutra lutra*, Linn.

Bell—*Lutra vulgaris*.

Otters frequent the streams of the New Forest and breed there

<sup>1</sup> Written by the Hon. Gerald Lascelles.

## A HISTORY OF HAMPSHIRE

in fair numbers, to the extent of some three or four litters annually. The Forest streams are well adapted for breeding places for this animal. Rising in the uplands and extensive bogs of the Forest, each stream pursues an independent course to the sea of some twelve or fifteen miles. Its upper waters lead to bogs full of frogs, elvers and other favourite food. For the middle portion of their course they run through woods, and are bordered by large forest trees, under the roots of which are vast cavernous recesses large enough and strong enough to hold many families of otters. Some of these fastnesses are almost impregnable. A pack of hounds hunts these rivers, and the sport shown is so good as to be very popular. It is extraordinary how difficult they often find it to kill an otter in streams only a few feet of water across, but with banks honeycombed by tree-roots and ancient 'holts.'

The principal rivers are (1) the Exe, which rises close to Lyndhurst, and flowing past Ipley to Beaulieu, develops into the beautiful estuary on which that village stands, and passing by Exbury, to which it gives its name, merges into the Solent at Needsore Point. (2) The Bartley Water, rising near Minstead, and passing through the ancient and newer woods of Rushpole and Busketts, flows into Southampton Water below Tolton. (3) The Lymington river. This stream rises or rather emerges by several different courses, from out of the high plains of Ocknell and Broomy; for the first part of its course it is known as the 'Highland Water,' and, flowing through the lovely scenery of Gritman Wood and the Huntly banks, is joined by the little Blackwater above New Park, and near the same place by the Ober Water (rising at Burley—another part of the same elevated plateau), and so flows past Rhinefield. The junction of the three forms the more pretentious volume of the Lymington river, which flowing through the beautiful woods of New Park and the picturesque glades of Brockenhurst park, is lost in the sea at Lymington. (4) The Avon Water which rises between Burley and Holmsley, and first draining the dense and vast recesses of the great Holmsley Bog (a very paradise for otters and for all forms of wild life), passes for most of its course through enclosed land, and after turning many a mill forms its own little estuary, merging in the Solent at the picturesque fishing village of Keyhaven. On each and all of these streams the otters breed. Their trackways have been found by the hounds as they pass across miles of upland from the head waters of one river to those of another. Doubtless they pass along the seashore, from mouth to mouth, in continuation of their ceaseless round of travel, pausing only when the bitch otter has laid down her cubs in one of the strongholds on the upper waters, and resting there till the young family is able to travel with the mother. In this way the whole New Forest and district between the sea shores and the wild and boggy uplands is haunted by these restless travellers, their unsuspected wanderings known only to the huntsman and the naturalist—whose studies and interests have so much in common one with the other.<sup>1</sup>

<sup>1</sup> Written by the Hon. Gerald Lascelles.



## MAMMALS

24. Common Seal. *Phoca vitulina*, Linn.

Frequently seen on the rocks off Freshwater, and occasionally on the coast of the mainland.

25. Harp Seal. *Phoca grænlandica*, Fabricius.

In the Tring Museum is a fine male example killed at Bournemouth, in or about January, 1898. This truly Arctic seal is one of the most familiar sights in high northern latitudes. It is extremely sociable, and I have seen as many as a hundred lying together on the ice-floes off Spitzbergen and elsewhere in the Arctic seas.

26. Grey Seal. *Halichærus grypus*, Fabricius.

Bell—*Halichærus gryphus*.

This beautiful seal can only be considered a chance straggler to the south coasts. I am aware of but one record for Hampshire, as given by Bell.

## RODENTIA

27. Squirrel. *Sciurus leucourus*, Kerr.

Bell—*Sciurus vulgaris*.

Abundant.

28. Dormouse. *Muscardinus avellanarius*, Linn.

Bell—*Myoxus avellanarius*.

This species is fairly well represented in the county. In the New Forest there is also a larger form which frequents the tops of high fir trees.

29. Harvest Mouse. *Mus minutus*, Pallas.

This species is still represented although it has greatly decreased in certain districts of late years owing to the loss of stubble by close-cutting machinery and the cleaning up of waste borders to cornfields.

30. Wood Mouse or Long-tailed Field Mouse. *Mus sylvaticus*, Linn.

Abundant everywhere.

31. Yellow-necked Mouse. *Mus flavicollis*, Melchior.

Not yet recorded. A striking example of how easily a small animal may be overlooked, it was first recorded as a British species by Mr. W. E. de Winton in 1894. (See the *Zoologist* for that year, p. 441.)

32. House Mouse. *Mus musculus*, Linn.

33. Black Rat. *Mus rattus*, Linn.

While examples of this rat have been captured in Southampton and Portsmouth as in other seaport towns of England, there appears to be no record of anything like an inland colony of them in Hampshire, during this century, at any rate. 'Mr. Moncrieff reported in 1894 that the headquarters of this species in Portsmouth was the convict prison near the docks' (Kelsall).

## A HISTORY OF HAMPSHIRE

34. Brown Rat. *Mus decumanus*, Pallas.

As everywhere.

35. Field Vole. *Microtus agrestis*, Linn.

Bell—*Arvicola agrestis*.

Abundant. Subject, like the following species, to great fluctuation in numbers.

36. Bank Vole. *Evotomys glareolus*, Schreber.

Bell—*Arvicola glareolus*.

This species, which might perhaps be better called the Wood Vole, in contradistinction to the former species, is generally distributed in Hampshire. The Field Vole and the Bank Vole have increased from time to time in such astonishing numbers as to form a veritable plague. During the years 1813 and 1814 the New Forest was among the districts so visited, and although the voles were then reported upon as field voles, there is little, if any doubt, that they should more properly have been referred to the present species. No fewer than 11,500 were during that visitation destroyed in the New Forest alone, and in other districts many more.

37. Water Vole. *Microtus amphibius*, Linn.

Bell—*Arvicola amphibius*.

Commonly distributed.

38. Common Hare. *Lepus europæus*, Pallas.

Bell—*Lepus timidus*.

Enormously reduced under the Ground Game Act, hares in many districts are now increasing in numbers. In the New Forest they are only numerous in the more highly preserved manors within or adjoining the Forest.

39. Rabbit. *Lepus cuniculus*, Linn.

In the New Forest rabbits are plentiful in dry seasons in sandy places, but are scarce on the heavy clay lands, or where there is but a thin stratum of soil overlying the gravel beds.

## UNGULATA

40. Red Deer. *Cervus elaphus*, Linn.

No record of the first introduction of the Red Deer exists. In all probability it was indigenous to the wild heaths of this country, and especially to the New Forest, which was a royal hunting-ground in the days of Canute, long before the district was strictly afforested by the Conqueror, of whom it is recorded that he 'loved the tall (*i.e.* the red) deer as if he were their father.' It was probably this variety of deer that was the special object of royal pursuit. For centuries they must have thriven along with the fallow deer, for no



## MAMMALS

record of a cross of blood occurs until the issue of a Treasury warrant of Charles II., dated 17th December, 1669. This warrant first directs the encoppicement of 300 acres of open forest, and after directing that the fences of certain existing plantations shall be repaired, goes on to state that 'the park there called New Park is necessary to be forthwith impaled and fenced in for the preservation of His Majesty's Red Deer now coming out of France, . . . and that the impaling and fencing the New Park is estimated by the said letter at the like sum of £50.' Instructions then follow for the carrying out of the work by contract with 'husbandmen, labourers, and others, . . . and for the defraying the charges of the said works, you are hereby authorised to mark, set out, cut down and make sale of so many dotard and decayed trees within the said forest, being not fit for any use of their timber, as will by the sale thereof at the best highest rates that can be had, raise the said several sums.'

It is therefore clear that a fresh strain of red deer was at that date imported, and carefully emparked. No subsequent record refers to New Park as being used for the confining of deer within its limits, and it is probable that in a short time the French deer were liberated in the Forest, and interbred with the stock of deer then roaming there.

In the New Forest, at any rate of late years, red deer never throve greatly, nor did their heads attain to very great size. Gilpin, writing in 1794, speaks of their numbers having become greatly reduced from what persons then living could remember. The woodland character of the New Forest seems to have been more adapted to the fallow deer, which throve and increased enormously well, while the red deer were better suited to the open heaths of Wolmer, stretching as at that time they did from the southern border of the county of Hants almost to Middlesex. White in his *Natural History of Selborne* relates the story of how Her Majesty Queen Anne, when travelling to Portsmouth, left the high road at Liphook, and taking her station on a declivity, now well known as 'The Queen's Bank,' had the red deer of the forest of Wolmer driven before her to the number of upwards of 500.

From this record it would appear as though in spite of all the care and strict preservation of deer in New Forest the chief home of the red deer in Hants was rather the forest of Wolmer and its vicinity. The deer of this herd after being greatly reduced by poaching, were eventually caught one by one by the Royal Hounds under the management of the Duke of Cumberland, and were conveyed to Windsor.

The red deer of the New Forest continued to afford sport to the royal pack till the middle of the 19th century, and soon after the Deer Removal Act of 1851, when the number of deer was reduced to the vanishing point, its visits ceased. The red deer now in the Forest amount to something under twenty in number.<sup>1</sup>

<sup>1</sup> Written by the Hon. Gerald Lascelles.

## A HISTORY OF HAMPSHIRE

### 41. Fallow Deer. *Cervus dama*, Linn.

Opinions are divided as to whether the Fallow Deer is indigenous to these islands, or whether we owe it, like many another good thing, to the Roman occupation thereof. The latter theory seems to be the more tenable one, and it is probable that New Forest owes its fallow deer as well as the noble beech-trees beneath which they roam to the Romans.

New Forest fallow deer have several peculiarities, one of which lies in the length of the horns and of their points, especially the brow antler, and in the peculiar tendency of the horns to differ from the ordinary palmated type, by the curious manner in which they are split and divided into antlers, rather than contained in a single 'palm.' In some cases the palmated form is almost lost, and the head approaches more nearly to that of a red deer with many points. These peculiarities have led so great an authority as Mr. Millais to the conclusion that the New Forest deer are the descendants of imported specimens of the great Fallow Deer of the Asiatic shores of the Sea of Marmora, sometimes called *C. Mesopotamicus*,<sup>1</sup> while the ordinary fallow deer usually found in parks is the descendant of the Fallow Deer of Asia Minor, *C. dama*.

This variety is found in several different colours in various parks, but the predominant ones are (1) the dark brown variety, shading off to dun in the under parts of the body; (2) the 'fallow' deer, or the light red form, covered more or less profusely with white spots on the back and upper part of the sides, and shading off to yellowish white on the under sides.

The dark variety first named are said to have been introduced into England, and especially into the New Forest, by James I., who imported them from Sweden.

But there is a peculiarity in the colour of the coats of the New Forest deer which stamps them as a genuine wild species distinct from the tame deer of parks. These wild deer are absolutely uniform in colour, except for the occurrence of an occasional albino. In summer they are one and all of the 'fallow' variety, that is to say red with white spots. In October the coat begins to change and to get darker in colour, till in November the winter coat is fully assumed, and it is invariably that of the dark brown or Swedish variety. In parks this marked change rarely occurs. A dark brown deer remains dark brown summer and winter alike, whilst a 'fallow' deer is fallow in summer and changes but little in winter. With New Forest deer it is not so. They are one and all examples in summer of the brightest of the 'fallow' species, while in winter they have, without a single exception, assumed the coats of the dark northern variety. Roe deer in the wild state change colour in a somewhat similar manner, being very bright red in summer, changing to a rich brown in winter; but the change is not nearly so marked as in New Forest fallow deer.

Up to the year 1851, and for centuries previously, the New Forest

<sup>1</sup> See *British Deer and their Horns*, by John Guille Millais, F.Z.S.



## MAMMALS

was kept as a vast 'chase,' or deer park, with great numbers of deer roaming throughout its wide area. The charm which their presence lent to the beautiful glades and woods of the Forest must have been indescribable. Their numbers varied from time to time considerably. That the Forest was overstocked at times is apparent from the statement of the keeper of Boldrewood Walk, that in the severe winter of 1787, there perished in his walk alone no fewer than 300 deer. The average number of deer in this walk was 1,000, and that of the whole Forest was given at 6,000. As at the same time and from the same cause there perished in the adjacent walk of Irons Hill the large number of 200 deer, it seems likely that 6,000 head was too much for the Forest to carry except in good seasons. This view is borne out by a return made in 1848, which gives the average number of deer for some previous years as 3,777.

This then was the condition of affairs with regard to the New Forest when, in 1851, the Act of Parliament was passed which was to destroy this beautiful feature of forest life and scenery. Economical reasons were paramount and the deer had to go. The Commissioners of Woods were instructed to do all that lay in their power to exterminate the deer within the space of two years. Hounds, nets, guns and all other engines of destruction were brought to bear on them, and so far as was humanly possible the deer were obliterated. Fortunately however certain conditions prevailed which rendered it impossible to carry out the Act in its entirety. On various sides of the Forest there lie the great woods of the manors of Langley, the Franchises, Hamptworth and Hale, and as the persecution waxed hot in the Forest they sought refuge without its verge. In some cases they were protected. In others the persecution was resumed, and the deer after a brief period of safety fled back to the Forest. In this way a small remnant of the ancient wild stock of deer, dating back to Saxon times, survived the two years during which the campaign was ordered to continue. At the close of this period the deer had practically been 'removed,' though partly in the Forest itself and partly in its environments there remained a small stock from which the ancient breed could be maintained. The Act which had decreed their destruction was also in a way their salvation, for under its provisions large plantations of young trees sprang up, and in their dark recesses a small herd of deer was comparatively safe, even if it had been thought necessary to renew their persecution. Fortunately for all lovers of wild life it was never held necessary under the terms of the Deer Removal Act to do this, and all that has been deemed essential is to keep down the number of wild deer within such limits as shall preclude their doing mischief, while no expenses are incurred in their maintenance.

There is now a herd of some 200 fallow deer, more or less, scattered over about two-thirds of the Forest. A pack of hounds is kept in the county which regularly hunts these deer and by its exertions assists to prevent their numbers increasing to mischievous dimensions, which

## A HISTORY OF HAMPSHIRE

would rapidly be the case were no steps taken to keep them down, so well do they thrive in a country eminently suited to their habits.

### 42. Roe Deer. *Capreolus capreolus*, Linn.

Bell—*Capreolus caprea*.

Roe deer, though not numerous, are now frequently seen in the Forest, but their appearance is of modern date. They have wandered thither from the adjoining county of Dorset, into which they were introduced, at Milton Abbey, about the beginning of the 19th century. So well have they thriven there that in the greater portion of the southern division of Dorset they are found in most woodlands. The first appearance of a roe deer in the New Forest was about 1870, when a fine buck was shot by one of the keepers. Two or three were known to exist from 1880 to 1890, and being but little molested their numbers have gradually increased. All the earlier arrivals were solitary bucks, probably deer that had been driven off by stronger bucks and wandered far afield. In 1880 a roe buck was taken alive at Hurst Castle, on the shores of the Solent. Evidently he was wandering towards the lofty downs of the Isle of Wight, and had made his way down the long neck of shingle that connects Hurst Castle with the mainland in the hope of reaching his point. Being frightened off the beach he sought to continue his journey over the mud at low water, and becoming hopelessly engulfed was captured by a fowler on mud pattens.

Gradually however a doe or two followed the bucks, and about 1890 roe deer were bred in the New Forest. The increase is however slow, and perhaps twelve or fifteen may be there now.<sup>1</sup>

## CETACEA

### 43. Common Rorqual. *Balænoptera musculus*, Linn.

This appears to be the most common whale to visit this coast. One was cast ashore at Gurnard Bay in April, 1842, and its bones are exhibited at Blackgang Chine; length upwards of 80 feet. Another, stranded between Milford and Hurst in December, 1881, measured 57 feet, and was cut up to manure the fields. A third, measuring about 70 feet, was cast up at Boscombe in the winter of 1896-97, and is now exhibited in skeleton form on Boscombe Pier.

### 44. Rudolphi's Rorqual. *Balænoptera borealis*, Lesson.

Bell—*Balænoptera laticeps*.

'One appeared off Ryde in September, 1888, and was hunted for three or four hours by about a dozen boats. I saw its carcase on the beach at Sea View, and I have no doubt that it belonged to this rare species. Its portrait in the *Illustrated London News* (Sept. 29th) shows that it is much broader in the head than the common species; length 39½ feet' (Kelsall).

<sup>1</sup> Written by the Hon. Gerald Lascelles.



## MAMMALS

45. Bottle-nosed Whale. *Hyperoodon rostratus*, Müller.

One in Southampton Water, Sept. 8th, 1798. This is described in the Hampshire Repository as a 'Becked or Bottle-headed Whale, 25 feet in length and 6 tons in weight.'

46. Porpoise. *Phocæna communis*, Lesson.

A summer visitor to this coast, the most familiar of all its kind.

47. Pilot Whale or Black Fish. *Globicephalus melas*, Traill.

One was stranded at St. Lawrence near Ventnor in December, 1853.

48. Risso's Grampus. *Grampus griseus*, Cuvier.

One ran aground and was killed at Puckaster Cove, near Ventnor, in the spring of 1843. Its skull was sent to the British Museum. Another has been captured at Sidlesham, on the borders of Hants and Sussex.

49. Common Dolphin. *Delphinus delphis*, Linn.

A probable visitor.

50. Bottle-nosed Dolphin. *Tursiops tursio*, Fabricius.

Bell—*Delphinus tursio*.

A dolphin which occurred at Shanklin, December, 1898, was identified by Dr. Cowper of that place as belonging to this species.

*Note.*—We cannot complete this paper without expressing our indebtedness to the pages of the *Zoologist* (3rd series), in which much valuable evidence, especially on the *Cheiroptera*, was collected by its former editor, Mr. J. E. Harting; and to him personally for his kind help. The notes upon the *Cetacea* have been contributed by the Rev. J. E. Kelsall, who has also kindly supplied other information as acknowledged in its place. Our thanks are also due to the Lord Montagu of Beaulieu; The Viscount Baring; A. C. Drummond, Esq.; the Rev. R. E. Harrison; W. Curtis, Esq.; E. Hart, Esq.; Courtenay Tracy, Esq.; the Rev. A. Kaye; W. P. Parkin, Esq.; Oldfield Thomas, Esq.; and W. E. de Winton, Esq.





# EARLY MAN

## PALÆOLITHIC MAN IN HAMPSHIRE IN THE PLEISTOCENE AGE

When man first appeared in the county of Hampshire the geography and climate were entirely different from those of to-day. The whole county stood at least 600 feet, and probably more, above its present level, and the Isle of Wight overlooked the valley of the Solent, and the still greater valley of the Channel, in the shape of a range of forest-clad hills. The rivers, now discharging their waters into the sea, flowed onwards to

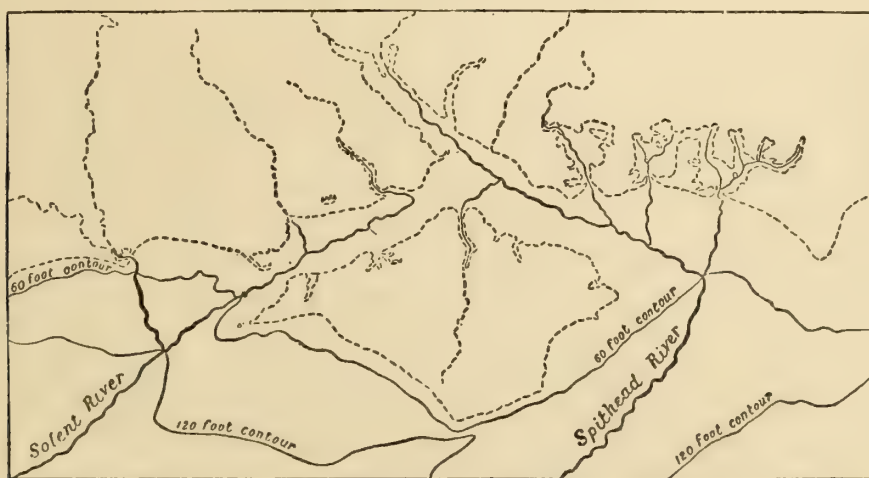


FIG. 1. HAMPSHIRE IN PLEISTOCENE AGE.

join the main river of the Channel, in which their waters mingled with those of the Somme and the Seine, and the smaller rivers of northern France. This main river passed westwards into the Atlantic at a point where the 100-fathom line is indented eastwards between the extreme point of Cornwall and Cape Finisterre on the shore of Brittany. Between these points, at a depth of 90 fathoms, its waters have been proved to have been fresh by the dredging up of fresh-water mussels, recorded by Godwin-Austen. The existing rivers also flowed at a higher level in their respective valleys, and have left their mark in the layers of gravel and brick earth recorded by Stevens, Codrington, and others, at various levels above their existing courses, at which they have been left behind by the gradual cutting down and deepening of the valleys. These strata in some cases crown the cliffs of the Solent and of the Isle of Wight, proving that since the time when they were accumulated at the bottom

## A HISTORY OF HAMPSHIRE

of rivers, the cliffs have been formed by the attack of the sea on the sides of the valleys. The presence of man at this remote period, known under the name of Pleistocene, is proved by the numerous implements which lie scattered near the old Palæolithic camping places on the sides of the streams, and now buried in its ancient deposits at various levels, and sometimes crowning the cliffs. These implements also occur in the marine shingle, more or less battered by the sea, having been derived from river strata at the top of the cliffs.<sup>1</sup>

At this time the British Isles were united to the Continent, to the same extent and degree as northern Germany. This fact will go far to explain the extremes of climate in Hampshire in those days. When Britain formed part of the Continent the climate was continental, the summers were warmer and the winters cooler than under the present insular conditions. It is very probable that snowfields and glaciers crowned the mountains of Wales, Cumbria, and Scotland, at the time when Palæolithic man hunted the mammoth and other wild beasts in Hampshire, and while herds of reindeer in the winter, and bisons innumerable in the summer, swung north and south, and east and west, from the Continent across the valley of the Channel to the area of Hampshire.

We may picture to ourselves the conditions of life at this period in Hampshire, from the discoveries made in the adjoining county at Fisherton, near Salisbury. In the spring, summer, and autumn, the woolly rhinoceros and mammoth, the bison and urus, the stag and the horse, ranged in abundance through the woodlands, while among the smaller animals may be noted the marmot and the lemming. In the depth of winter other arctic animals, such as the musk sheep and reindeer, were to be found. Wild boars were in the woodlands, and alpine hares in the higher grounds. The Palæolithic hunter had formidable rivals in the chase of these animals in the lion and the spotted hyæna. He appears before us at this time as a nomad, poorly equipped for his environment, without knowledge of metals or of the art of grinding his rude stone implements to a sharp edge. He was unaided in the chase by the dog, had no domestic animals, was ignorant of pottery. Apart from his cunning, he was distinguished from the wild animals by which he was surrounded, by the possession of rude implements, and by the knowledge of fire.

The Palæolithic hunter belongs to the oldest and earliest and most widely-distributed division of mankind, known under the name of River-drift Man. His implements are always of the same rude type, and occur under the same conditions, in association with the extinct animals, from the British area southwards as far as the Mediterranean Sea. They occur in the Isles of Greece, in Northern Africa, and in Palestine. They have

<sup>1</sup> The chief authorities who deal with Palæolithic implements in Hants are : Codrington, *Quart. Journ. Geol. Soc. Lond.*, xxvi. p. 528 ; Evans, *Ancient Stone Implements of Great Britain*, passim ; Stevens, *Flint Chips*, passim ; Stevens, *History of St. Mary Bourne*, pp. 14-22 ; various writers in *Proceed. Hants Field Club*.



## EARLY MAN

been met with in various parts of the Deccan. They indicate a condition of primeval savagery from which all the existing races of mankind have emerged. They cannot be identified with any existing race, and they have left no mark in the ethnology of the British Isles.

There can be but little doubt that the Cave-Men, who possessed a higher culture than their predecessors, also visited Hampshire in the Pleistocene age. In the course of their wandering to and fro, from their haunts in Belgium and France to the caves of Devonshire and of Somerset and South Wales, they would naturally have visited this area, although, as yet, their camping places have not been discovered. They are probably represented among the existing races of mankind by the Eskimo, using similar implements, and living to a large degree on the same wild animals. They were, however, without dogs to aid them in their hunting.

### THE RELATION OF THE PREHISTORIC TO THE PLEISTOCENE AND HISTORIC PERIODS

Before we can deal with the succeeding races of men who have occupied Hampshire in prehistoric times, it is necessary to clear the ground by defining the term Prehistoric. For me it covers all the events which took place in the interval between the Pleistocene and Historic ages.<sup>1</sup> It is the last but one of the great biological divisions into which the later Tertiary groups, not merely in Europe, but in Asia, the Americas and Australia, naturally fall. It is mapped off from what went on before in Europe, not only by the absence of all the extinct mammalia, excepting the Irish elk, which lived in the Pleistocene age, but by the introduction of the domestic animals under the care of man—the short-horned ox, the sheep, goat, domestic hog, and the dog, hitherto unknown in Europe. Some of these reverted to their aboriginal wildness, and shared the forests and the prairies with the wild animals that survived those changes which caused the extinction of the larger and fiercer Pleistocene mammals. Their remains in the refuse heaps and burial places, as well as in the peat bogs, alluvia, and submerged forests, characterize the Prehistoric as distinct from the Pleistocene age.

A profound geographical revolution also occurred in the interval between the two, not merely in the area of the British Isles, but generally in Europe. The Pleistocene Atlantic coast line, now marked by the 100-fathom line, gradually sank, and the sea gradually extended over the Pleistocene lowlands, isolating Ireland from Britain, occupying the greater part of the areas of the North Sea and of the English Channel, and completely cutting off Britain from the Continent by the 'silver streak.' In the south of Europe there was a corresponding depression in the Mediterranean area, the land barriers which connected Africa with Spain by way of Gibraltar, and with Italy by the way of Malta and Sicily, were submerged, and the valley of the Adriatic was overwhelmed by the sea.

<sup>1</sup> Boyd Dawkins, *Early Man*, p. 257.

## A HISTORY OF HAMPSHIRE

This profound change was followed in the British Isles by the natural consequences of our country having ceased to be continental. The extremes of climate, inseparable from continental conditions in these latitudes, became gradually replaced by an insular climate such as we now enjoy, tempered by the near presence of the sea. There is therefore a great gulf fixed between the Prehistoric and Pleistocene ages. On the far side of it stands the Palæolithic hunter, and on the other the peoples who invaded Europe in the Neolithic age, and in the succeeding ages of Bronze and of Prehistoric Iron. We cannot therefore wonder at the contrast in civilization presented by a comparison of the Palæolithic man with the Neolithic inhabitants of Europe. Although there is every reason to believe that, in some part of the world hitherto unknown, man gradually passed from the hunter-stage of civilization into that characterised by the use of the domestic animals and the knowledge of arts higher than that of hunting, the evidence points to the fact that not merely in the British Isles, but all over Europe, there is no trace of any point of contact between the two.

The Prehistoric period is not, however, clearly defined from the Historic period which followed after. No great climatal or zoological change took place in Europe from that time to this. The new animals introduced under the care of man developed into the existing breeds. The small Neolithic short-horned ox, for example, lived on in Britain, and is now represented by the small Welsh, Scotch, and Irish cattle. The new Neolithic arts, introduced form the foundation on which the civilisation of Europe has been built up during the long ages which followed after; and further, the introducers themselves are represented in the existing European peoples by the small, dark, Iberic stock in Spain, France, and Britain. Starting from this great gulf the story of the European peoples may be said to have been continuous, and the orderly sequence of Prehistoric events gradually passes into the region of history, in which it is not only recorded, but also measured in terms of years.<sup>1</sup>

We will deal with the Prehistoric inhabitants of Hampshire in their proper sequence, the stages of culture represented by the Neolithic Bronze and Iron ages.

### HAMPSHIRE IN THE NEOLITHIC AGE

The geography of Hampshire may be said to have come into being at the beginning of the Prehistoric period. The submergence, by which the waters of the Atlantic gradually crept over the ancient valley of the English Channel, was still going on, and the ancient forest, now represented by the roots and trunks of trees and the peat mosses lying beneath the sand banks and mud banks of Southampton Water, the Solent generally, and the sea coast, were gradually being destroyed by

<sup>1</sup> It is obviously impossible to fix the date of Prehistoric events in the absence of any means of knowing either the time in years during which the events happened, or the length of the interval separating any two events.



## EARLY MAN

the invading waters. During the Neolithic, and perhaps the Bronze age, the sea margin had advanced as far as the existing 10-fathom line (see map, fig. 2), and the forests still formed one unbroken sweep from the existing coast line to join the forests then covering the whole of the Isle of Wight with the exception of the Chalk Downs. The discoveries made in the Southampton Docks (fig. 3) leave no doubt as to this point. There the stumps of trees have been met with, under thicknesses of peat and estuarine mud, at depths varying from 33 to 42 feet below high water mark. The age of this forest is proved by the remains of the animals to which it gave shelter, as well as the traces of man himself. Besides the wild animals, such as the urus, stag, roe deer, and the wild boar, there are the remains of the domestic animals, the shorthorned ox (*Bos longifrons*) which had reverted to feral conditions, like the horses introduced into the Americas by the Spaniards, and into Australia by the English. Their presence fixes the date as not being older than the Neolithic age,

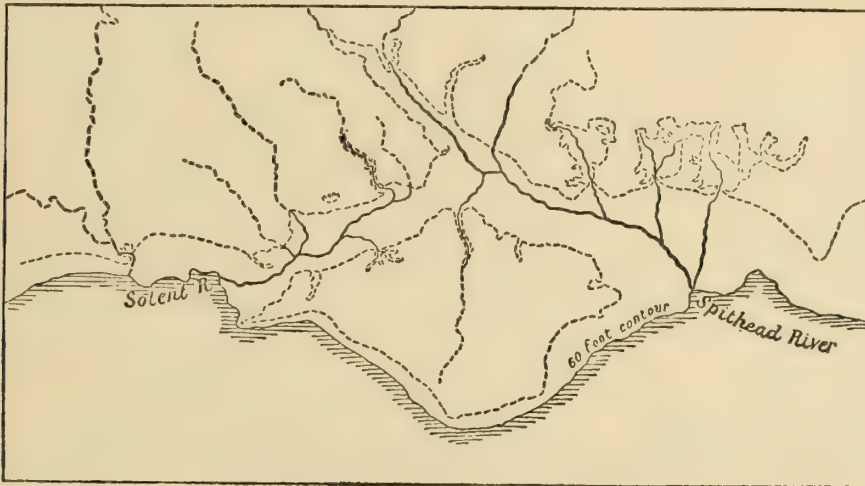


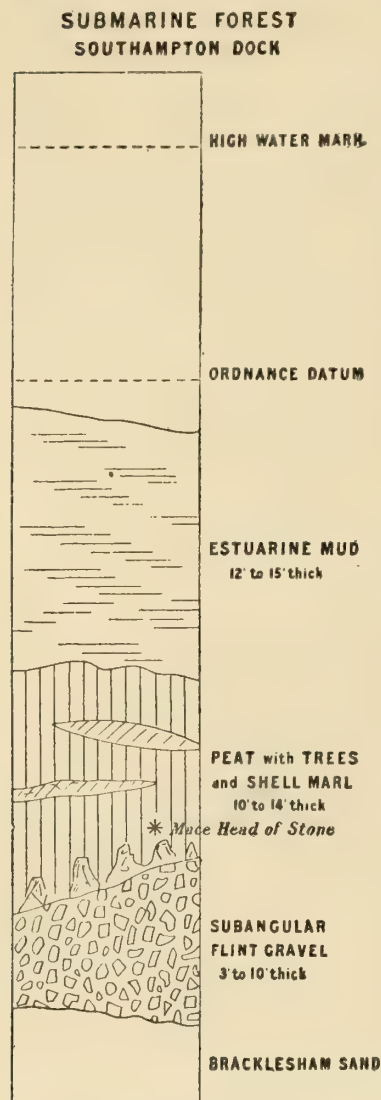
FIG. 2. HAMPSHIRE IN NEOLITHIC, AND PROBABLY ALSO IN BRONZE AGE.

and this conclusion is confirmed by the fact that the forest grew in some places on river gravels accumulated by the Pleistocene rivers. The traces of man consist of splinters of flint and of cores, a long polished bone dagger, and a carefully finished round head of a mace made of stone. If the last belongs to the Bronze age, it must be inferred that the Isle of Wight was joined to the Continent, not only throughout the Neolithic age, but down to the age of Bronze.

The forest extended over the greater portion of the area of Hampshire, and as far as the dry, grassy slopes of the Chalk Downs, broken only by the morasses which extended along the courses of the rivers. It was in these dry upland areas that the Neolithic herdsmen and farmers, the ancestors of the small dark element in the population of this and the adjacent counties, founded their principal settlements. Here, without the trouble of clearing the land and burning the trees, they could establish their homesteads and grow their crops. Here too was grass in plenty for the support of their flocks and herds.

## A HISTORY OF HAMPSHIRE

Polished stone axes, and axes chipped to the same pattern as those which have been polished, have been found in considerable numbers



Scale:  $\frac{1}{16}$  inch to 1 foot..

FIG. 3.

over large areas in Hampshire, and are characteristic of the Neolithic age. Many of the latter, made of flint (Bere, St. Mary Bourne, Dunmer, etc.), it may be remarked, are of the same type as those which were manufactured in the Neolithic mining centre of Cissbury, near Worthing, and probably have been obtained by means of barter from that centre. There are also polished axes made of greenstone (Minley Manor, Blackwater, etc.), which are formed of a material which does not occur nearer than the Channel Isles or Somerset. They were probably derived from the nearest parts of France, where it was commonly used for the manufacture of axes. Among the Neolithic remains in the county we may note flint adzes, flakes, spindlewhorls of stone, various bone implements, fragments of coarse pottery, with paste containing sand or powdered flint, and invariably made by hand, and remains of the domestic animals—the short-horned ox, the domestic hog, the sheep, goat, horse, and the dog.

The Neolithic homestead consisted of clusters of huts, generally circular, and from 6 to 10 feet in diameter, and sunk to a depth of from 3 to 6 feet in a dry soil, chalk or gravel. Their walls were probably of wattle and daub, and their roof composed of a covering of brake fern or heather, resting upon branches of trees so arranged that there should be an outlet at the top for the smoke of the fire inside. These are indicated at the present time by the circular hollows, so abundant in the higher chalk downs and dry gravelly and sandy heaths of Hampshire and the adjacent districts. In the centre of each hut was a hearth made of rough flints. The cooking was carried on by heating stones, and using them for warming the water in the cooking pots. Possibly hot stones may also have been used, as in the South Sea Islands, for cooking in a hole in the ground without the use of a pot. The broken bones of the animals used for food, together with the broken implements, were allowed to remain in the huts until they formed, along with the accumulation of sand and mud, a thickness of from 4 to 5 feet. Each of these clusters of huts belonged to a separate community, and was, as a rule, sur-



## EARLY MAN

rounded by a bank bearing a fence, which not only protected the inhabitants from the neighbours, but also preserved their flocks and herds from the attack of the wolves, bears, and foxes haunting the neighbouring forests. Inside spinning and weaving, and pottery making, and the grinding of the corn with stone crushers used on a flat stone slab, went on. Outside there were patches of wheat and of flax, the latter for the manufacture of linen. The food consisted mainly of the flesh of the domestic animals, with a variable percentage, according to the success in hunting, of the flesh of wild animals. The inhabitants wore clothes made of homespun from the fleeces of their sheep, and linen made from their flax, as well as the skins of the various animals, wild and domestic. Such a picture is presented to us by the discoveries recorded by Mr. Stevens at Hurstbourne, as well as by those made in other districts outside Hampshire. It cannot be fully completed until the settlements in Hampshire, as yet scarcely touched, have been properly examined and referred to their true archæological age. In the case of Hurstbourne, the spot has been occupied from the Neolithic age down to the Roman occupation in Britain.

We will turn now from the Neolithic homes to the Neolithic graves. Here and there a long oval burial mound, as at Andover, may be seen, contrasting in its shape with the more numerous circular burial places. This long type has been proved by Dr. Thurnam to have been the resting-places of the Neolithic chiefs. The burial was carried out in the following manner. First of all the turf was cleared away, and on the smooth surface the body was deposited, in the contracted position in which the dead had slept his last sleep. Food was placed along with it, and implements, both probably for the use of the dead in the spirit world. Sometimes the dead was laid in a trench; then soil was heaped over it, and the place was visited from time to time, and feasts were held, each of which is marked by layers of bones at various depths beneath the existing surface. Or it may be that these also were placed for the use of the dead; in either case the burial mound was increased in height by the addition of earth.

This Neolithic people, as I have pointed out elsewhere, invaded Europe from the north-east, bringing in with them domestic animals, and arts hitherto unknown in the west. They occupied the whole of France and of Spain, as well as the British Isles. They were of non-Aryan stock, and spoke a tongue represented now by the almost extinct Basque language. They formed a homogeneous population in Neolithic Hampshire, without mixture of any other race.<sup>1</sup>

<sup>1</sup> The principal authorities used in this section are: Evans, *Ancient Stone Implements of Great Britain*; Stevens, *History of St. Mary Bourne*; Kemble, *Horæ Ferales*, edit. Franks, and various writers in the *Archæologia*, the *Proceed. Soc. Antiq. Lond.*, and *Proceed. Hants Field Club*, *passim*.

## A HISTORY OF HAMPSHIRE

### THE CONQUEST OF HAMPSHIRE BY THE GOIDELS IN THE BRONZE AGE

While the Neolithic inhabitants of the British Isles were living undisturbed by the attack of an alien race, under the protection of the 'silver streak,' the Goidels, who formed the van of the great Aryan migration, were conquering their way westwards through the region of France into Spain. They had become masters of the southern shores of the English Channel in the Neolithic age, and did not dare the perils of the crossing into Britain until they had obtained the better weapons introduced into middle and western Europe from the south, which characterize the beginning of the Bronze civilization—the plain or slightly flanged axe (Sholing, Southampton), and the knife dagger.

These two weapons have been repeatedly met with in Hampshire under various conditions, sometimes where they have been lost by their possessors, and at other times in the burial mounds which are so abundant on the high chalk downs, and the dry gravelly soil of the hills. These burial mounds are generally circular, and as a rule were raised over the ashes of the dead, either put into a funeral urn, or with an urn inverted over them. On the bare chalk down of the Isle of Wight, sweeping eastwards from Freshwater to Westover, Brixton and Gatcombe, they cluster along an ancient track, and obviously stand in relation to the clusters of pit-dwellings south and east of Calbourne. They lie scattered through the heaths of the New Forest, but chiefly cluster on the bare downs forming the northern part of the county, and ranging from Wiltshire, past Andover, Basingstoke, and Winchester, to the borders of Sussex. Here again they are in connection with numerous groups of pit-dwellings, and stand in close relation to old trackways and prehistoric fortified camps of uncertain age. It is therefore clear that the conquest of Hampshire took place at the beginning of the Bronze age.

The Goidels were tall and fair, with round heads, high foreheads and cheek-bones, and with aquiline noses. They intermingled with the small dark aborigines, and are now only to be studied with any success in their descendants, the Gael of Scotland, and the tall, fair Irish and Manx, in those regions where they have been protected from the attack of the later invaders of the British Isles. In Hampshire they have left few traces in the names of places and of rivers, unless Hambledon, and other words such as Dunbridge, near Romsey, and Dunley, near Whitchurch, and Exbury, at near the mouth of the Beaulieu river, be taken to be based on the Goidelic *dun* (fort) and *Exe* (water). *Sorbiadunum* (Old Sarum) however, beyond doubt, contains a Goidelic root; and Dublin, 'a black pool' known to fishermen as the Teat, derives its name from the same Goidelic source as the capital of Ireland.

It is probable, as I have mentioned in a preceding page, that the Isle of Wight was still united to the mainland during the early Bronze age, and that the Goidels of the downs to the east of Freshwater could visit their kinsmen of the Winchester downs without taking boat. The



## EARLY MAN

depression was completed, and Wight became an island at some period in the interval separating the age of Bronze from the time of the Roman Conquest.

The Goidels brought into Hampshire not merely new weapons, but new customs and a higher civilization. They burnt their dead, they worshipped the unknown God in temples, the largest of which are represented by the great stone circles of Avebury and Stonehenge. They were also in communication, probably by means of barter, with the civilized peoples of the Mediterranean, and bronze ornaments, such as bracelets and beads of various kinds, ornamented in patterns of right lines or chevrons, were introduced from the south, and ultimately came to be manufactured in the district. The various implements and weapons of Arreton Down, in the Isle of Wight, illustrate the second phase in the Bronze civilization, according to Evans, or that characterized by heavy dagger blades, flanged celts, and tanged spear-heads. The third is illustrated by the hoard found at Blackmoor, consisting of 27 leaf-shaped swords, 2 scabbards, and 26 spear-heads. To this latest stage also belong the palstaves and socketted celts. It is interesting to note that the sword and the socketted spear come in later than the dagger. Arrowheads of flint, and stone maceheads and battle axes, were used in the earlier of the three stages of culture, and occur in various burial mounds, along with the characteristic bronze implements in southern England. It may further be remarked that no bronze swords have yet been found in any burial mound, which implies either that the burial mounds belong to a period before the introduction of the sword, or that it was not the practice to bury that weapon with the dead.<sup>1</sup>

### THE BRYTHONS IN HAMPSHIRE IN THE PREHISTORIC IRON AGE

We must now briefly survey Prehistoric Hampshire during the Iron age, which shades off insensibly into the period of the Roman contact at the beginning of history in Britain. The Bronze age on the Continent was closed by the spread of the knowledge of iron, and the advance which resulted from its employment for implements and weapons. In Britain it is associated with the arrival of the people who have left their name in that of our island. They belong to the same Celtic division of mankind as the Goidel, and like them spread over the greater part of the country. They did not, however, master the Highlands of Scotland, nor did they penetrate further west than the shores of Wales.

In Hampshire many of the place names, such as Combe (Welsh *cwm*), Winchester, and others, and river names, such as Avon, mark their possession of the land. Among the Prehistoric antiquities which may be referred

<sup>1</sup> The principal authorities used in this section are: Evans, *Ancient Bronze Implements of Great Britain*; Boyd Dawkins, *Early Man in Britain*; and various writers in the *Archæologia*, the *Proceed. Soc. Antiq. Lond.*, *Journ. Archæol. Assoc.*, *Proceed. Hants Field Club*, *passim*.

## A HISTORY OF HAMPSHIRE

to them are many of the camps on the Downs, but more particularly the great Prehistoric fortified city of the south, *Calleva Atrebatum*, with its earth rampart and fosse surrounding an area far too large to be fortified by the Romans, who built the later and smaller city of Silchester. The hill fortress of St. George's Hill at Winchester, and the great earthworks of Old Winchester, about a mile to the east of Exton, are also to be referred to the same people. These centres of population were linked together by trackways which mostly ran on the tops of the hills, avoiding as far as possible the swamp and the woods. One such road is admirably described by Stevens. It passes from the west of St. Mary Bourne, and from its being part of the line of communication between Hungerford and Southampton, it now bears the name of Hungerford Lane. It formed part of a network linking together the fortified towns and the open villages.

These roads in their irregular windings contrast strongly with the straight lines of communication made by the Roman engineers. They were intended not merely for travellers on foot, and pack horses, but also for wheeled vehicles, such as those the wheels of which have been found in the lake village of Glastonbury, and the chariots in which the warriors have been found buried in burial mounds in the Yorkshire wolds. In this connection it may be noted that Pytheas describes the British tribes as using chariots (B.C. 325) and that the troops of Cæsar suffered considerably from their use in his invasion of Britain.

These villages, as for example that explored at Hurstbourne by Stevens, consist of circular huts, similar to those previously described as being in use in the Neolithic Age, but containing various iron articles of the Prehistoric Iron age, pottery turned in the lathe, and other evidences of the development of civilization. Sometimes they contain coins belonging to the period immediately before the Roman Conquest of Britain. The gold coin found in the pit dwellings at Hurstbourne, is an imitation of a stater of Philip of Macedon, without inscription, like those found in the fortress of Hod, near Blandford, which is of the Prehistoric Iron age. It is assumed by Evans to date between 150 B.C. and the invasion of Britain by Julius Cæsar. In later times, as the influence of Rome increased in Gaul, imitations of Roman coins, such as those of Augustus and others, were current until they were supplanted by the Roman coins themselves when the British tribes came under the Roman dominion.

We must note further that the Belgæ, who have left their name in *Venta Belgarum*, were Brythonic, that their invasion of Britain took place before the middle of the first century B.C., and that the *Pax Romana* put an end to their advance westwards and northwards over Britain. The close connection of south-eastern Britain with the Continent is proved not only by the Atrebates of Belgic Gaul having settled in Hampshire, but further by the fact that Commios, the great leader in Belgic Gaul, retired to Britain after his final defeat by Cæsar. Here he became the master of Hampshire and parts of the adjacent counties, and



## EARLY MAN

established himself so firmly that he handed his dominions to his sons, Tincommios, Epillos, and Verica.<sup>1</sup>

In concluding this meagre outline of Hampshire it must be noted that the antiquities have not as yet been sufficiently explored to allow of fuller detail. Till this has been carried out the numerous camps cannot be dated. The pit dwellings too, with very few exceptions, have not as yet been examined in such a manner as to allow of their being assigned to their proper place in the archæological record. The remains of the Prehistoric Iron age are as yet scarcely touched. Nevertheless, on the present evidence, we are able to conclude that Hampshire arrived at its present configuration by a long series of changes reaching to a remote geological period. We can also see that successive races of mankind, Iberic, Goidelic and Brythonic, occupied the county, each bringing in a civilization higher than that which went before, and each contributing an element to the mixed population of the county. The story may now be left to the writer of the history of the Roman Conquest, and of the effect of the Roman dominion on the people and on the county.

<sup>1</sup> The chief authorities used in this section are : Stevens, *History of St. Mary Bourne* ; Evans, *Ancient British Coins* ; Guest, *Origines Celtica* ; Boyd Dawkins, *Early Man in Britain* ; Rhys, *Celtic Britain* ; various papers in the *Archæologia*.





# ROMANO-BRITISH HAMPSHIRE

1. Introductory Sketch of Roman Britain. 2. Towns of Roman Hampshire : Silchester.
3. Inscriptions of Silchester. 4. Towns : Winchester. 5. Villas and Farm Buildings.
6. Roads. 7. New Forest Potteries of Native Art. 8. Military Remains : Porchester.
9. Bitterne. 10. Miscellaneous Discoveries : The Blackmoor Hoard. 11. Alphabetical list of places in Hampshire where Roman Remains have been found, with map.

## I. INTRODUCTORY SKETCH OF ROMAN BRITAIN

WITH the Roman occupation the student of Hampshire antiquities enters on the historic period. He ceases to depend solely upon archæological evidence; the narratives or the allusions of ancient writers lend him their aid, and he might perhaps be expected at this point to commence a regular history. In reality he cannot do that. Two facts, which are not always adequately recognised, limit him to a more humble, though not an easier task. The first of these facts is to be found in the character of the Roman Empire, of which Britain formed a province. Alike in its vast extent and its complex organization, that Empire was constituted on a scale which reduces details to insignificance. Its history is one of great developments slowly advancing among the populations of three continents: we do not meet in it that continuous individual life, that rapid succession of incidents and quick growth of tendencies which mark the cities of ancient Greece or the little nations of modern Europe. Single men, local occurrences, are the least important items in the Roman imperial annals, and the fortunes of single provinces disappear beside the great movement of the whole mass. We can describe the characteristics of each province, its populousness, its degree of civilization, its mineral or agricultural or commercial wealth, and we can string together into a rough sketch a few events connected with it. But we cannot write a real history of it.

A second fact imposes an equally serious limitation. When the Romans ruled our island, it was not divided into its present counties nor into any districts geographically identical with them. Neither the boundaries of the Celtic tribes, nor those of the Roman administrative areas, so far as we know them, agree with existing county boundaries. The student of Roman remains found in any one county has to deal with

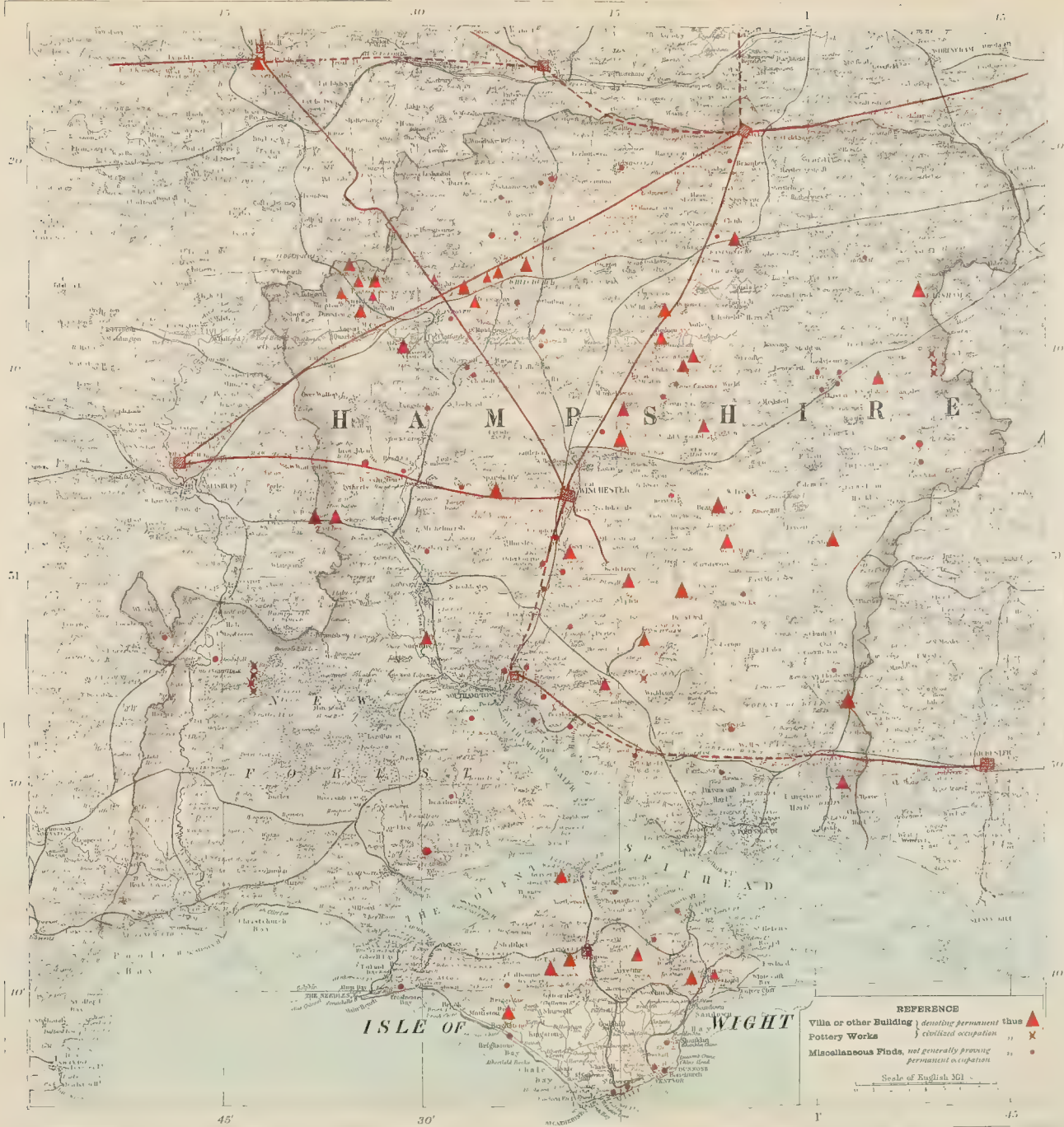
## A HISTORY OF HAMPSHIRE

a division of land which for his purpose is accidental and arbitrary. The phrase Roman Hampshire may be convenient, but, strictly speaking, it is a contradiction in terms. The limits of Hampshire coincide neither with the limits of the Belgæ, Atrebates and other Celtic tribes inhabiting it, nor with any divisions set up by the Romans. For our present purpose it is a meaningless area with no unity. We can describe it, but we cannot write a history of it.

These two facts make it desirable to diverge a little from the plan followed by most county historians in dealing with the Roman antiquities of the county described. Hitherto, it has been customary to give a narrative of the chief events recorded by ancient writers as having occurred in Britain, and to point out which of these events took place, or may be imagined to have taken place, within the county. The result is always to give an impression that somehow the county had in Roman times some sort of local individuality and local history. We shall here adopt a different plan, suggested by the recent developments of archæological research. Utilizing the abundant archæological evidence, which is now far better known and appreciated than it was a hundred or two hundred years ago, we shall try first to sketch briefly the general character of the Roman province of Britain, its military, social and economic features. We shall then point out in some detail how far the antiquities of Hampshire illustrate this general sketch; that is, how far the district now called Hampshire was an ordinary and average bit of Roman Britain.

The Roman occupation commenced in A.D. 43. At first its progress was rapid. Within three or four years the Romans overran all the south and midlands as far as Exeter, Shrewsbury, and Lincoln: part was annexed, part left to 'protected' native princes. Then came a pause: some thirty years were spent in reducing the hill tribes of Wales and Yorkshire, and during this period the 'protected' principalities were gradually absorbed. About A.D. 80 the advance into Scotland was attempted: in 124 Hadrian built his Wall from Newcastle to Carlisle, and thereafter the Roman frontier was sometimes to the north, never to the south of this line. The 'province' thus gained fell practically, though not officially, into two marked divisions, which coincide roughly with the lowlands occupied in the first years of the conquest and the hills which were tamed later. The former were the districts of settled civil life. The troops appear to have been very soon withdrawn from them, and, with a few definite exceptions, there was probably not a fort or fortress or military post throughout this part of our island. On the other hand, the Welsh and northern hills formed a purely military district, with forts and fortresses and roads, but with no towns or ordinary civilian life. It was the Roman practice, at least in the European provinces of the Empire, to mass the troops almost exclusively along the frontiers, and Britain was no exception. The army which garrisoned this military district was perhaps forty thousand men. It ranked as one of the chief among provincial armies, and constituted the most important element in Roman Britain.









## ROMANO-BRITISH HAMPSHIRE

With the military district, however, we are not now concerned. For our present purpose it suffices to note its existence, in order to explain why the traces of military occupation are rare in Hampshire. But we may pause to examine the chief features of the non-military districts within which the area of Hampshire is included. These features are not sensational. Britain was a small province, remote from Rome, and by no means wealthy. It did not reach the higher developments of city life, of culture, or of commerce, which we meet in more favoured lands—Gaul or Spain or Africa. Nevertheless, it had a character of its own.

In the first place, Britain, like all the provinces of the western



FIG. 1. BRONZE TANKARD FROM ELVEDEN (ESSEX), ILLUSTRATING THE 'RETURNING SPIRAL' IN LATE CELTIC ART (p. 268).

Empire, became Romanized. Perhaps it became Romanized later and less perfectly than these, but in the end the Britons adopted generally the Roman speech and civilization, and in our island, as in all western Europe, the difference between Roman and provincial practically vanished. When the Roman rule in Britain ended (about A.D. 410), the so-called departure of the Romans did not mean what the end of English rule in India or French rule in Algeria would mean. It was not an emigration of alien officials, soldiers and traders. It meant rather what the severance of New Zealand or Australia from England would mean to-day: it was more administrative than racial. Probably the country folk in the remoter parts of Britain continued to speak Celtic during the Roman period: thus much we may infer from continental analogies and from the revival

## A HISTORY OF HAMPSHIRE

of Celtic in the sixth century. But the townspeople and the educated seem to have used Latin, and on the side of material civilization the Roman element reigns supreme. Before the Roman period there was a Late Celtic art of considerable merit, best known for its metal work and earthenware, and distinguished for its fantastic use of plant and animal forms, its employment of the 'returning spiral' (fig. 1), and its enamelling. This art and the culture which went with it vanished before the Roman. In a few places, as in the New Forest, its products survived as local curiosities ; in general it met the fate of every picturesque but semi-civilized art when confronted by an organized coherent culture. Almost every feature in Romano-British life was Roman. The commonest good pottery, the so-called Samian, or Terra Sigillata, was copied directly from an Italian original and shows no trace of Celtic influences ; it was indeed principally imported from Gaul. The mosaic pavements and painted stuccoes which adorned the houses, the hypocausts which warmed them, and the bathrooms which increased their luxury, were equally borrowed from Italy. Nor were these features confined to the mansions of the wealthy. Samian bowls and coarsely-coloured plaster and makeshift hypocausts occur even in the cottages of outlying hamlets. The material civilization of Roman Britain comprised few elements of splendour or magnificence, but it was definitely and decisively Roman.

Agreeably to this general character of the province, we find town life in it, but the highest form of town life known to the Romans is naturally rare. The *coloniæ* and *municipia*, the privileged municipalities with constitutions on the Italian model, which mark the supreme development of Roman political civilization in the provinces, were not common in Britain. We know only of five. Colchester, Lincoln, Gloucester, and York were *coloniæ*, Verulam probably a *municipium*, and, despite their legal rank, none of these could count among the greater cities of the Empire. Four of them, indeed, probably owe their existence, not to any development of Britain, but to the need of providing for time-expired soldiers discharged from the army.

On the other hand, many smaller towns reached some degree of municipal life. Originally (as it seems) Celtic tribal centres, they grew into towns, just as the tribal centres of northern Gaul grew into towns, under the influence of Roman civilization. They were mostly small, but their sizes varied widely—from hardly twenty to more than two hundred acres. Strong walls protected them from external assault ; inside, at least in the larger towns, a forum, built on a Roman plan, provided accommodation for magistrates, traders and idlers. What was the legal status of such a town, what town council or police it had, we do not know, but we can hardly doubt that some sort of town life existed there. Hampshire contains two instances of such towns—Silchester and Winchester ; others are Canterbury and Rochester, Dorchester and Exeter, Cirencester, Leicester, and, far in the north, Aldborough in the Vale of York.

Outside these towns the country seems to have been principally



## ROMANO-BRITISH HAMPSHIRE

divided up into estates, usually called 'villas,' and in this respect again Britain resembles northern Gaul. The 'villa' was the property of a large landowner who lived in the 'great house,' if there was one, cultivated the land immediately round it (the demesne) by his slaves, and let the rest to half-serf *coloni*. The 'villa' system, in fact, was the origin of the mediæval manorial system, and on the Continent (though not in our island) the development of the one into the other can be traced continuously. The estates doubtless varied in size as much as estates in all ages and countries. In Gaul they are said sometimes to have included eight or ten thousand acres, but we have no means of judging in Britain. They formed, for the most part, sheep runs and corn land, and supplied the cloth and wheat which are occasionally mentioned by ancient writers as products of the province during the later Imperial period. The landowners may have been to some extent immigrant Italians, but it can hardly be doubted that, as in Gaul, they were mostly the Romanized upper classes of the natives. The common assertion that they were Roman officers or officials, may be set aside as rarely, if ever, correct.

The houses of these landowners deserve a word of notice, for they do not in the least resemble the houses of ancient Rome or Pompeii. They belong principally to two kindred types, which occur only in Britain and in northern Gaul. One of these types is simpler than the other: it shows a straight row or range of rooms with a passage along them, and it has been denominated the Corridor type. The other shows three such rows of rooms with corridors set round three sides of a tolerably large, open, rectangular yard, and it has been denominated the Courtyard type. Both kinds occur indifferently in towns and in the country, but in the country they are naturally supplemented by outbuildings, barns and cottages. The corridor houses are generally the smaller of the two kinds: some of them measure hardly more than forty by sixty feet, while in the larger courtyard houses the yards alone may be three times that size. These dimensions refer only to the ground-floors, but upper stories were probably rare, and we can therefore guess reasonably at the total accommodation. The origin of these two types of house is uncertain. They are unquestionably distinct from anything Italian. Probably they were in the first instance rural. As a glance at the plan of Silchester will show, neither the Courtyard houses nor the Corridor houses fit, like proper town houses, into streets: they are country houses loosely conglomerated, with much garden space between. They occur in the specially Celtic districts of Britain and northern Gaul, and we may be tempted to suppose them Celtic. The Celts in these countries had in Cæsar's time a definite style (or styles) of house building.<sup>1</sup> Perhaps our two types are the descendants of what Cæsar saw, modified by Roman additions of mosaic and fresco and hypocaust and bathroom, but substantially indigenous.

The peasantry who worked on these estates, or were otherwise occu-

<sup>1</sup> *De Bello Gallico*, v. 12. 3: compare v. 14. 1.

## A HISTORY OF HAMPSHIRE

pied in the country, lived in rude hamlets, sometimes in pit dwellings, sometimes in huts, with few circumstances of comfort or pleasure. Their civilization, however, as we have said, was purely Roman in all such matters as the better objects in common use or the warming and decoration of the houses. Even among the country folk the Late Celtic art appears mainly to have vanished.

One feature, not a prominent one, remains to be noticed—trade and industry. We should, perhaps, place first the agricultural industry, which produced wheat and wool. Both were exported in the fourth century, and the export of wheat to the towns of the lower Rhine is mentioned by an ancient writer as considerable. Unfortunately the details of this agriculture are almost unknown: perhaps we shall be able to estimate it better when the Romano-British ‘villas’ have been better explored. Rather more traces have survived of the lead mining and iron mining, which, at least during the first two centuries of our era, were carried on with some vigour in half a dozen districts—lead on Mendip, in Shropshire, Flintshire and Derbyshire; iron in the Weald and the Forest of Dean. Other minerals were less important. The gold mentioned by Tacitus proved very scanty, and the far-famed Cornish tin seems (according to present evidence) to have been worked comparatively little and late in the Roman occupation. The chief commercial town was, from the earliest times, Londinium (London), a place of some size and wealth, and perhaps the residence of the chief authorities who controlled taxes and customs dues. The usual route to the Continent for passengers and for goods was from the Kentish harbours to Gessoriacum (Boulogne), but the discovery of a pig of Mendip lead at the mouth of the Somme suggests occasionally longer voyages.

Finally, let us sketch the roads. We may distinguish four groups, all commencing from one centre, London. One road ran south-east to Canterbury and the Kentish ports. A second ran west and south-west, first due west from London to Silchester, and thence by ramifications to Winchester, Dorchester, and Exeter, Bath, Gloucester and South Wales—we shall shortly return to this group. A third, Watling Street, ran north-west across the Midlands to Wroxeter, and thence to the military districts of the north-west: it also gave access to Leicester and the north. A fourth ran to Colchester and the eastern counties, and also to Lincoln and York and the military districts of the north-east. To these must be added a long single road, the only important one which had no connexion with London. This is the Foss, which cuts obliquely across from north-east to south-west, joining Lincoln, Leicester, Bath, and Exeter. These roads must be understood as being only the main roads, divested, for the sake of clearness, of many branches and intricacies; and, understood as such, they may be taken to represent a reasonable supply of internal communications for the province. After the Roman occupation had ceased, they were largely utilized by the English, but they do not much resemble the roads of mediæval England in their grouping and economic significance. One might better compare them to the rail-



## ROMANO-BRITISH HAMPSHIRE

ways of the present day, which equally radiate from London. And indeed it is probable that roads, properly so called, were not more numerous in Roman Britain than railroads in modern England.

Such was Roman Britain, so far as it was not military—a land of small country towns and large rural estates; permeated by the simpler forms of Roman civilization, but lacking the higher developments; not devoid of agricultural and mineral resources, but not rich; a comfortable land, perhaps, but certainly an unimportant fraction of the Empire.

### 2. TOWNS OF ROMAN HAMPSHIRE: SILCHESTER

We pass to the details of Roman Hampshire. They will illustrate the preceding sketch, and it in turn will show their proper value and significance: thus, as we hope, the reader will preserve that sense of proportion which the topographical study of special localities is apt to overpower. Let us anticipate for a moment the result. Our detailed survey will show us a district closely resembling all the rest of southern, non-military Britain, yet not without its points of peculiar interest. There were two fair-sized country towns, Silchester and Winchester; and the former of these merits special notice, for the excavation of it has shown very plainly the character of an ordinary Romano-British town. There were also one or two other places which may have been towns or villages. Outside these towns there were many villas, scattered over all the district except the south-west and the extreme north-east, and with the 'villas' we may suppose agriculture. That and a peculiar manufacture of pottery are the only industries traceable inside our limits. There were also roads, though no trade route of special importance. To these ordinary Romano-British features we have to add two interesting and exceptional details. In its south-east corner Hampshire contains one of the few Roman forts in southern Britain, and in its south-west corner one of the few survivals of Celtic art in the manufacture of earthenware.

The towns claim first notice, and we begin with Silchester. The general consent of recent writers identifies Silchester with the Romano-British *Calleva Atrebatum*, *Calleva* the capital of the *Atrebates*, a town mentioned by Ptolemy, the *Itinerary* of Antoninus, and the so-called *Ravennas*. But this unanimity has only been reached after long dispute. The topographers of the sixteenth century, who relied mainly upon Ptolemy, put *Calleva* either at Oxford, as did Michael Servetus, or at Wallingford, as did Leland and Humphrey Lhuyd, and usually ascribed no ancient name to Silchester. At the end of the century Camden accepted Wallingford for *Calleva*, while for Silchester he selected the name of *Vindomis* from the *Itinerary*. He was followed by most writers in the seventeenth and early eighteenth centuries, till Horsley, in his *Britannia Romana* (1734), pointed out that Silchester was *Calleva*. That view, as has been said, is now universally accepted. The reasons which we can give for it are in the main the same as those given by Horsley. They are not direct proofs, but rest on a striking combi-

## A HISTORY OF HAMPSHIRE

nation of circumstantial evidences. In the first place, the *Itinerary* tells us that Calleva was the meeting-place of roads from London, Venta Belgarum and Spinæ ; Venta being shown by its name to be Winchester, and Spinæ to be Speen, near Newbury. In the second place, if the *Itinerary* numerals are correct, Calleva was by road some twenty-two Roman miles from Venta,<sup>1</sup> about as far from the Thames crossing of the London road and about fifteen Roman miles from Spinæ. Thirdly, Calleva is described by Ptolemy and the *Itinerary* as a tribal centre and the end station of several routes : it was therefore no mere posting-house, but a town. The modern site, which is to be identified with Calleva, must show these features, and Silchester satisfies the test in a remarkable degree. Roman roads can still be traced from it towards London and Winchester ; its distance from London, Winchester, and Speen agrees quite as well as could be expected with the required distances, and its remains unquestionably represent a fair-sized town. No rival site can even distantly compete with it. Haslemere, Farnham and Guildford, Henley and Reading, Streatley and Abingdon, have all been proposed by various writers. But not one of these is the site of a Roman town ; not one stands on Roman roads running in the proper directions, while most of them are not on Roman roads at all ; not one is at a suitable distance from London, Winchester, and Speen. We may freely accept Horsley's identification of Silchester with Calleva. The name is appropriate. Calleva, as Mr. Rhys tells me, is 'the town in the wood,' and the neighbourhood of Silchester was probably forest in Roman times.

Another ancient name has often been given to Silchester, *Caer Segont*. The history of the appellation is curious and unsatisfactory. Some time in or about the seventh century an unknown writer compiled a list of twenty-eight cities in Britain. The names are Celtic, with *Caer* prefixed ; the meanings of most of them are unknown, and the value of the whole list is very doubtful. However, it contains a *Caer Segeint*—or, as some manuscripts read, *Regeint* or *Legeint*. This list came into the hands of a twelfth-century antiquary and historian, Henry of Huntingdon, who altered it to his taste, inserted various identifications, apparently of his own devising, and incorporated the result in his book. Among the identifications we find Silchester suggested for '*Caer Segent*.' Henry implies that he had heard of Silchester, and we may presume that he inserted it just as he inserted one or two other Roman sites of which he knew. Why he inserted it opposite *Caer Segent* is not clear : no kind of reason, however, exists for supposing that he had any special authority for so doing, and his theory is probably quite arbitrary. Once made, the identification stuck. Mediæval historians and modern antiquaries alike repeated it, and other names were brought into connection with it. The *Caer Segeint*, at which the so-called Nennius placed the tomb of the younger Constantine, was naturally taken to be Silchester. The *Segontiaci* mentioned by Cæsar

<sup>1</sup> A difficulty about Vindomis is probably imaginary : see p. 321.



## ROMANO-BRITISH HAMPSHIRE

were considered to be a tribe which dwelt round Silchester. The British coins of Tasciovanus with the legend *SEGO* were ascribed to a Silchester mint. The altar to Hercules Saegon . . ., found at Silchester in 1744, was declared to record the god of the district, and *Caer Segeint* itself was arbitrarily respelt *Caer Segont*. It is a perilous edifice of suppositions. The name *Segeint* is no doubt a later form of *Segontium* or some similar Romano-British name, just as *Gereint* is a later form of *Gerontius*. But the position of *Cæsar's Segontiaci* is quite unknown; the coins inscribed *SEGO* do not occur near Silchester, and perhaps belong to the north bank of the Thames, and the epithet *Saegon* seems to be phonetically distinct from the names beginning with *Sego*—. Moreover the simplest explanation of the original seventh-century *Caer Segeint* is that it denoted *Segontium*, which is now *Carnarvon*, in North Wales. Till some stronger evidence be forthcoming, it will be wiser to refrain from calling Silchester *Caer Segeint* or *Segont*.

From the name we pass to the place. Silchester is situated about midway between Reading and Basingstoke on the northern verge of Hampshire: were it not, indeed, for an odd little deflection of the county boundaries, it would be half in Hampshire and half in Berkshire. The meaning of the modern name is wholly unknown, and we shall not delay over it: the place itself concerns us more. It stands on a hill with a wide prospect east and south, covering a hundred acres, in shape an irregular hexagon. Round it, in circuit of a mile and a half, are the stately ruins of the ancient city wall, and beyond these on three sides a wider circuit of earthworks of unknown age. Within, all is level corn land, save for a farmhouse and church. Of the ancient town hardly one stone is left upon another, and the excavations reveal no more than low flint foundations, hardly rising above the level of the streets and floors. The details of those excavations are given in a separate section by Mr. Fox and Mr. Hope, two of the excavators<sup>1</sup>: here we have only summarized the general character of the place, as the best known among ordinary Romano-British towns.

Silchester is older than the Romans. Its name *Calleva Atrebatum* declares it a Celtic tribal centre, and the coins of the British ruler *Eppillus*, with their legends *CALLEV* and *REX CALLE*, show that it was a capital, and probably a mint, about the beginning of the Christian era. Possibly the external earthworks, already mentioned, may prove, when examined, to be part of its defences: possibly, too, some of the pits and foundations discovered inside the area of the Roman walls may belong to the Celtic period. But the excavations have thrown no light on this. Nor do we know even the extent of the territory occupied by the *Atrebates*. We can only say that it



FIG. 2. GOLD COIN OF THE BRITISH CHIEF EPPILLUS REX CALLE(VAE).

<sup>1</sup> The reader will notice that I occasionally differ from the excavators' views. I should like here to say that these differences do not concern the facts revealed by the excavations, but the interpretations which are to be put upon them.

## A HISTORY OF HAMPSHIRE

must have included parts of Hampshire and Berkshire. To assert, as Dr. Guest did, that it took in all Berkshire as far north as Oxford and Eynsham, is to go very far beyond the evidence which we possess on the point.

The Romano-British town, on the other hand, is better known, perhaps, than any provincial town of the Roman Empire. Its ground plan, now two-thirds unearthed, is remarkable enough. Roughly it resembles a chess board. The streets are all straight and at right angles, and in the centre, where the roads from the four chief gates intersect, is a complex of buildings, two acres in area, called the Forum. The details of the Forum, its basilica or public hall, and its shops, are described by Mr. Fox below (p. 361). Here it is important to note that the whole closely resembles the Fora of Italy and other provinces, save that the basilica is unusually large, as indeed befits a climate like ours, while the public offices in general (apart from the basilica) are inconspicuous and the whole arrangements simple. A few other public buildings have been found elsewhere in the town—three small temples; an extensive edifice with baths attached, which may have been a public guesthouse; and the remarkable little Christian church close to the Forum. Add the amphitheatre outside the north-east wall, and you complete the list of known public buildings.<sup>1</sup> Not even an aqueduct seems to have existed: the population apparently depended on the wells, and must have fared badly in dry summers. The private houses show the Courtyard and the Corridor types already mentioned, and one of them embodies an ingenious attempt to adapt those types to the Italian model. They attest comfort and elegance, but not wealth or splendour; the mosaics found in them are, for instance, rarely of special merit. Nor were these houses numerous: large areas within the walls were left vacant as yards or gardens, and it has been estimated that Silchester contained hardly more than eighty houses deserving that name. The absence of an aqueduct and the fewness of houses is significant of the size of the population. Even if one allows for mud huts or other cottages, which may have vanished or escaped the excavators' notice, it is difficult to reckon the inhabitants as many. Their social status and occupations are not known to us: inscriptions, our best guides, fail us at Silchester. That they were not in general wealthy, is apparent from the character of the houses and of the small objects found in them. The only industry of which we have extensive trace, is attested by some dyeing furnaces, used perhaps for wool brought in from the sheep runs on the downs. The general character of Silchester civilization is, however, unmistakable. The lines of the streets, and the designs of the public buildings, the fitting and ornamentation of the private houses (fig. 3), the

<sup>1</sup> Some maps and descriptions of Silchester show a series of baths, found in 1833, due east of the Forum. If this were correct, we should have to add a second bathing establishment to the one mentioned above. But the accounts of the excavations in 1833—printed in the *Reading Mercury* (Feb. 18th, 1833) and the *Gentleman's Magazine* (1833, i. p. 122)—show that the baths found in 1833 are identical with those mentioned above.





FIG. 3. DIAGRAM SHOWING RESTORATION OF PATTERN OF PAINTED WALL PLASTER ( $\frac{1}{4}$  linear) ILLUSTRATING THE CONVENTIONAL ROMAN STYLE OF HOUSE-DECORATION AT SILCHESTER.





## ROMANO-BRITISH HAMPSHIRE

metal or earthenware objects of domestic use, are throughout Roman, and Late Celtic art appears only in occasional reminiscences. Similarly the words scratched casually by workmen or servants on brick or pottery are Latin words, and one inscribed tile, of the first or second century,

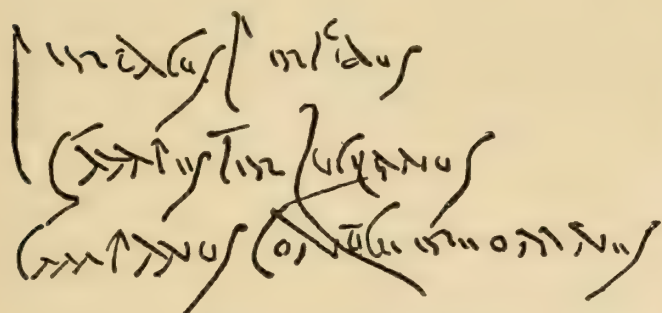


FIG. 4. INSCRIBED TILE FROM SILCHESTER (p. 282).

seems to bear part of a Latin writing lesson in which the teacher first scratched five Roman names which illustrated various letters and ended with the familiar Virgilian tag, 'contiguere omnes' (fig. 4). Latin, it is plain, was written and spoken in Silchester. To sum up, we seem to discern

a typical country town, where life was easy and commonplace, where the civilization of the age was known in its less exciting aspects, and the quick exhausting life of a great municipality or commercial centre found no entrance.

Such a town can have no history, and Silchester has none. Its remains do not even lie in successive strata, like the remains of many long-lived towns. Mr. Joyce, indeed, professed to have found something of the sort in 1870. According to his observations the coins of early emperors were specially common in the foundations of the forum; and in one private house he distinguished four levels, the lowest yielding a coin of Claudius, the second coins of Pius and Commodus, the third coins of about 270 A.D., and the fourth coins of the fourth century. But subsequent explorers have noted no such strata. Thus in Insula xix. they have found a house of (probably) the first century, underlying a later one; but they record no difference between the smaller objects discovered in the one and the other. Even the rubbish pits, usually so helpful, seem to refuse their aid at Silchester, and the attempts which have been made to date the architectural fragments seem to me at present premature. However, some evidences may be noted. The earliest coins which are really common there are those of the Flavian Emperors, Vespasian, Titus and Domitian (70-95), and one mosaic so closely resembles Pompeian work that it may be assigned to the same period. By these hints we may provisionally date the origin of Silchester as a Romanized town. The ground plan of the place will help us further. That curious scheme of straight streets, crossing at right angles, and a central forum, did not grow up gradually; it was made. It is the work of some Roman surveyor, who laid the town out once for all. This laying out took place at an early date, for no street has been found to cross the remains of pre-existing Roman buildings, and very few such can therefore have been erected before the streets were designed. One or two houses which front the streets do not stand absolutely flush with the street-lines, and one or two

## A HISTORY OF HAMPSHIRE

abut awkwardly upon them. Hence it has been argued that these houses existed before the streets, and this view is possible, and consistent with our present thesis.<sup>1</sup> But no house is actually cut through by a street, and yet that must have occurred if Silchester contained many houses before its streets were laid out. The plan of the streets is singularly regular, though the *insulae* are not all equal in size, and it is incredible that such a plan could be imposed on an occupied site without really serious disturbance of some existing buildings. As there is no trace of such serious disturbance, we may conclude that the ground plan therefore coincides with the evidence of coin and pavement to place the origin of Silchester at an early date. Let us venture a step further. Tacitus tells us that his father-in-law Agricola, while Governor of Britain (A.D. 78–85), encouraged the provincials to construct temples, and fora, and houses, and took official action to that end. It is possible that Silchester is one result of such encouragement and action.<sup>2</sup>

The walls which encircled the town, and which still in lonely strength encircle its vacant site, were probably not erected at the time of its foundation. They resemble some other walls in Britain which belong to the late third or the fourth century, and we may reasonably assign them to that period. It is a probable date, for then the barbarian was breaking into the Roman Empire; and then, and especially at the close of the third century, towns were fortifying themselves with walls throughout western Europe. One curious detail may be thought to favour this view. In 1744 a broken inscription was found in grubbing up a crab-tree on the top of the wall west of the north gate. The inscription dates from the first years of the third century, and its presence on the top of the wall is remarkable. For altars, gravestones, and other inscribed and sculptured stones have been discovered in great profusion inside many of the town walls erected at the end of the third century. They were utilized without stint or scruple as building material.<sup>3</sup> The inscribed stones of Silchester may have been similarly utilized, and, if so, we shall have no hesitation in dating its walls. The fragment mentioned is, however, an isolated example, and may be due to accident.<sup>4</sup> It gives

<sup>1</sup> I confess, however, that it seems to me rash to argue from minute inexactnesses of frontage or from awkwardnesses which may be due to quite other causes. Thus in House 2 of *Insula xxi* two rooms have been so rebuilt that their second shape suits the street-front better than their first. But it does not follow that the laying out of the streets came between the two constructions. The original plan of the whole house was plainly distorted by circumstances unconnected with the presence or absence of streets. In arguing about such details we approach a region of domestic probabilities where argument becomes futile.

<sup>2</sup> Professor Hübner (*Archæologia Æliana*, xi. 94–96) conjectures that Silchester was a military post and, if I understand him, a legionary fortress, in the early days of the Roman conquest. I do not see any reason for this conjecture. No military objects have ever been found at Silchester except, perhaps, an eagle and a bit of inscribed bronze (p. 282), and these are not necessarily of military origin.

<sup>3</sup> Examples are given by M. Schuermans in the Belgian *Bulletin des commissions royales d'art et d'archéologie*, xvi. 451; xxvii. 37; xxviii. 77; xxix. 25; and *Annales de l'institut de Luxembourg*, xxvii. II.

<sup>4</sup> It has been suggested that a farmer put the stone on the top of the wall to clear it from his plough land, and that the crabtree then grew over it. A farmer would naturally



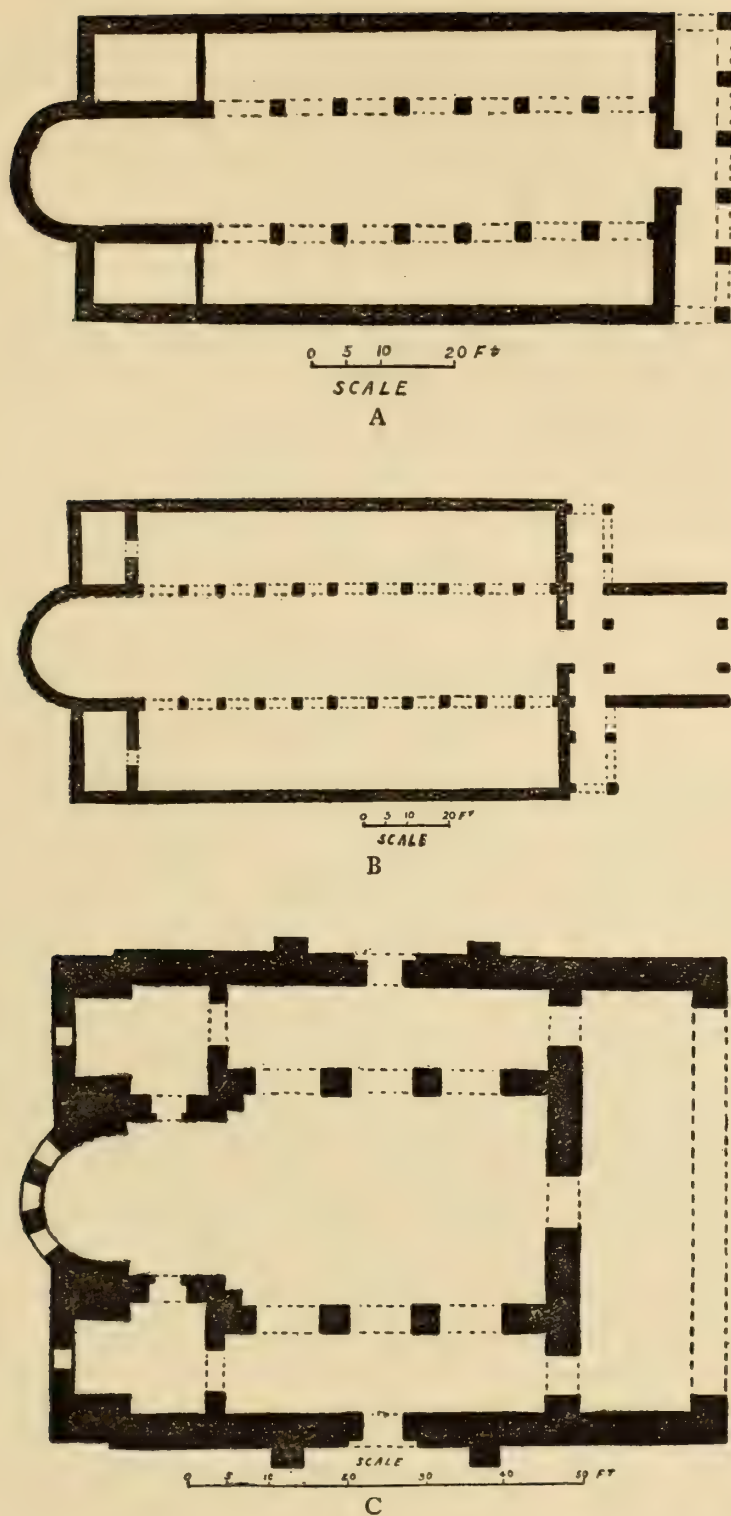


FIG. 5. THREE PLANS OF CHRISTIAN CHURCHES OF THE BASILICAN TYPE.

A and B from Roman Africa, c from Isauria in Asia Minor, built in the fourth and fifth centuries. These churches, though larger and better preserved than the supposed church at Silchester, show the same typical features, an apse and chambers on each side, nave and aisles and porch or narthex. They are introduced here as illustrating the type which seems to be represented at Silchester and elsewhere in the Empire.

## A HISTORY OF HAMPSHIRE

a presumption, but not conclusive proof. No argument, let us add, can be derived from the line chosen for the walls. This may or may not have been determined by pre-existing earthworks, but the outline which it forms is just such as we find in some Roman towns on the Continent.<sup>1</sup>

Another object can be dated with much probability—the little structure near the Forum, which is best explained as a Christian church. The remains of this building do not, indeed, provide evidence of any exact date, such as an inscription would give ; they do not even bear any distinctive emblem or monogram of Christianity. But researches in other parts of the Empire, and especially in Roman Africa (Tunis and Algeria), have revealed numerous instances of Christian churches erected in or about the fourth century. Thus, according to MM. Cagnat and Ballu, the African town Thamugadi contained at least seven little churches, and examples of varying sizes from other African sites can be counted by the dozen. These churches are usually of the type called ‘basilica,’ and they show that in and about the fourth century that type was commonly employed for churches throughout the Empire (fig. 5). The building at Silchester, so far as it is preserved, conforms closely to that type. We may, therefore, call it a little Christian church. Its precise date cannot be fixed. Christian public worship may well have been tolerated in Britain before Constantine’s Edict (312–313 A.D.), which, indeed, affected primarily the Eastern Empire only ; and churches may have been erected even in the second half of the third century. A small ornamented mosaic panel in the floor of the apse has been said to indicate an early rather than a late date, but this assertion would also prove the building to be pre-Christian, and it must be observed that few mosaics can be dated with any certainty. Some time or other, in or about the fourth century, the church was reared on a vacant plot of ground to house a little congregation—amongst it, perhaps, the owner of a Christian gold ring, which has been found in Silchester. We know that Christianity spread widely over non-military Britain during the period with which we are now concerned, and a congregation at Silchester is what we should expect.<sup>2</sup>

By toilsome argument we have wrung reluctant dates from the ground plan, the walls, the church of Silchester. Yet, after all, these do but confirm our previous verdict. They tell us no incidents, they suggest no chronicle. Roman Silchester lived its life without a history ; and as it lived it died. We do not know the time or manner of its end. The coins found in it show that it was inhabited right up to the end of the Roman occupation, but its after-fortunes are unknown. Its excavators

leave the stone at the foot of the wall, or bury it in a hole, or carry it off as building material ; but the ruins of the wall at the point indicated are not at all high.

<sup>1</sup> The best recent maps show the north-west wall impinging on the corners of two *insule* in a way which absolutely contradicts the idea that the streets were laid out after the walls. But I fancy that this point needs further excavation.

<sup>2</sup> *English Historical Review*, July, 1896.



## ROMANO-BRITISH HAMPSHIRE

declare that it was not burnt, as most Romano-British towns were burnt, by English invaders. Rather, it was deserted and fell into decay. One object alone has been discovered in it which might seem to light the darkness enshrouding its end, and that light only leaves the darkness deeper. In 1893 a well was found in the north-west part of the town, sunk through the corridor of a Romano-British house, and presumably constructed after that house had been abandoned and ruined. The well was 8 feet deep, and in it, at a depth of 5 or 6 feet, was a broken sandstone pillar bearing an imperfect Ogam inscription. Under the pillar, and flattened by its weight, lay a pewter vessel; but no other distinctive objects are recorded as noticed in the well. The pillar itself (fig. 6) is an ordinary Romano-British fragment, perhaps of a late date: the Ogam, as deciphered by Professor Rhys, is part of a sepulchral inscription, and reads:

EBICATOS . . . . .  
 . . MAQVIMVCOI . .

that is, ‘(the grave of) Ebicatos . . , son of the kin of . . .’ The formula is one which is well known to have been in use among the Goidelic branch of the Celts, and indicates a method of counting descent otherwise than by the father. The occurrence of this Ogam at Silchester is remarkable. No Ogam has before been found in England outside the districts occupied by Goidels—that is, outside the districts west of the Severn and Exe—and it may be that this exception indicates some immigrant from the west. Unfortunately, the date of the object cannot be determined. Neither the pillar nor the well in which it was discovered are likely to be earlier than the end of the Roman period; and Professor Rhys tells me that he thinks the Ogam not later than the fifth or sixth centuries. Here we must leave it—for the present a strange and isolated exception, a riddle which has not yet been read.<sup>1</sup>

Historians, or perhaps romancers, have endeavoured to fill up the gap in our knowledge of Silchester. Geoffrey of Monmouth mentions Silchester as one of Arthur’s principal cities, the scene of his coronation, and the cathedral city of a diocese in his kingdom. We need not believe him. He knows Silchester only by its English name, and he obviously did not borrow that from any authentic Roman or British source. He



FIG. 6. THE SILCHESTER OGAM.  
 ( $\frac{1}{2}$  linear)

<sup>1</sup> *Archæologia*, liv. 223, 441; Rhys and Brynmor-Jones, *The Welsh People*, pp. 45-65.

## A HISTORY OF HAMPSHIRE

was a contemporary of that Henry of Huntingdon whom we have already mentioned (p. 272). Probably he had heard the fame of Silchester just as Henry had done, and therefore inserted it in his delightful narrative. Names add weight and splendour to poetry, and Geoffrey was a poet, though dull successors have taken him for a historian.

### 3. THE ROMAN INSCRIPTIONS OF SILCHESTER

1. Thin slab of black marble, 20 inches high by 18 inches broad, broken on two sides; found in 1744 in the south-west corner of the Forum, 4 feet underground. It was at first in the collection of Mr. John Stair, of Aldermaston, but is now lost. The letters seem to have been quite clear and are well attested. Those of the first line were  $2\frac{1}{2}$  inches high, the rest a trifle smaller. They appear to have been cut elegantly (see fig. 7).

*Deo Her[culi] Saegon... T. Tammon[ius] Saeni Tammon[i fil.] Vitalis, ob hono[rem]...*

‘To Hercules Saegon... dedicated by T. Tammonius Vitalis, son of Saenius Tammonius, on account of the honour...’

Hercules Saegon... has usually been interpreted the ‘Segontiac Hercules’ (see p. 273). But the substitution of *ae* for *e* is rare on Roman inscriptions—it is commonest in the Christian period—and is unlikely on a well-cut inscription and in the case of a proper name. Certainly it does not seem to occur in any other example of the numerous names formed from the same Celtic stem as Segontium. Dr. Whitley Stokes connects Saegon... with the Irish *saith*, Latin *saevus*, with the suffix which we have in Birrago, Teutagonus (see Zeuss-Ebel, p. 795).

The description of the dedicator is rather curious, but no other completion of the names seems preferable. Saenius is a common Italian name; Tammonius occurs only at Silchester, where there was obviously a family so called (see No. 3). The occasion of the dedication and the honour meant cannot now be determined.

A moulded bronze frame, found by Mr. Stair in the Forum, has been considered the frame of this dedication; but the idea is unlikely.

Independent copies of the inscription were taken by Mr. Stair, published by Ward in the *Philosophical Transactions*, 43 (1744), 201, and by Dr. Jeremiah Milles, preserved in the British Museum (MS. Addl., 15801, fo. 13). These copies agree exactly, and all later accounts (C. I. L., vii. 6, etc.) are based on them. The description of the material, black marble, is from Dr. Milles.

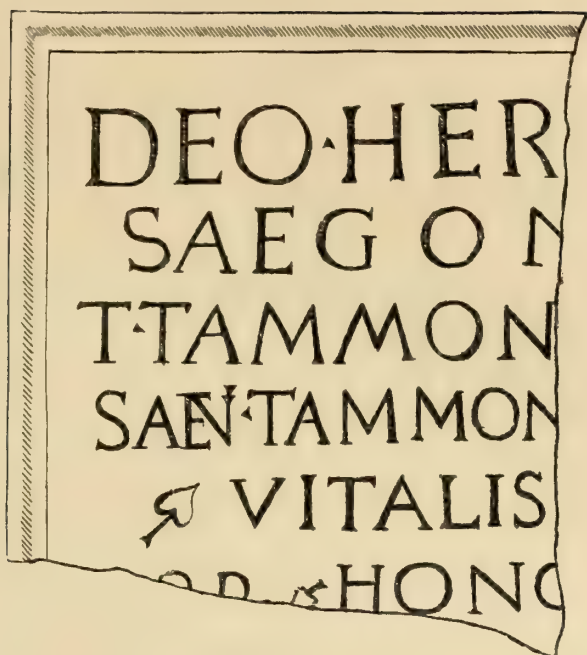
2. Freestone fragment, 20 inches long by 18 inches wide. According to Mr. Loveday, writing to Ward, it was found ‘in 1732, as they were grubbing a crabtree which grew upon the slope on the top of the wall west of the north gate.’ Now lost.

IVLIAEAVG  
MATRISE  
NATVSET  
CASTROR  
MSABINVS  
VICTOROB

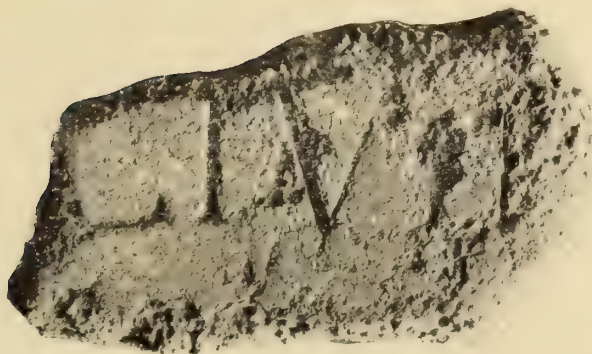
*Juliae Aug(ustæ) matri senatus et Castror(um) M(arcus) Sabinius Victor ob...*

‘In honour of Julia Augusta, Mother of the Senate and Army, erected by M. Sabinius Victor, on account of...’

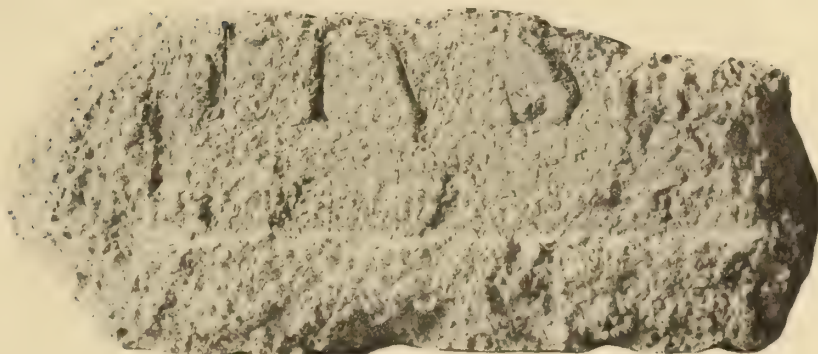




DEDICATION TO HERCULES SAEGON (p. 280).  
(About  $\frac{1}{8}$  linear)



4A.



4B.

FIGS. 7. INSCRIBED FRAGMENTS FOUND AT SILCHESTER (p. 281).

*To face page 280.*





## ROMANO-BRITISH HAMPSHIRE

Iulia Augusta is the empress Iulia Domna, wife of Septimius Severus. The inscription must have been set up somewhere between the accession of Severus in 193 and the death of Domna about 217. The motive for its erection was stated in the lost portion at the end. The fact that it was found on the top of the wall is discussed above, p. 276.

John Loveday of Caversham, an eighteenth-century antiquary, sent accounts of the stone to Ward and Hearne; see Ward's copy of Horsley's *Britannia*, in the British Museum, and the MS. of Hearne's Diary in the Bodleian Library (A.D. 1734, vol. 143 p. 74). Gough summarized Ward's note in his *Additions to Camden*; Hearne's is printed in the third edition of Hearne's *Leland*, vi. 52. Loveday gave to Ward a far fuller account of where the stone was found than he gave to Hearne (or than Hearne recorded); otherwise the information is the same. Loveday could only read IVL . . . VC in the first line and nothing in the second line. In 1744 Jeremiah Milles made a copy of his own, preserved in the British Museum (MS. Addl., 15801, fo. 13) and read the whole inscription as printed above. Even without this copy, however, we could safely restore the first two lines from the five letters recorded by Loveday and from the general formula of the inscription; and Hearne records that Roger Gale did in fact so restore them. All later accounts (C. I. L. vii. 7, etc.) depend on one or other of these sources.

3. Tombstone found at Silchester in the sixteenth century: since 1750 preserved at Trinity College, Cambridge, where I have seen it.

MEMORIAE  
FL·VICTORI  
NAE·T·TAM  
VICTOR  
CONIVNX  
POSVIT

'In memory of Flavia Victorina, set up by her husband T. Tammonius Victor.' Compare the Tammonii in No. 1.

[C. I. L. vii. 8.]

4-10. Ten fragments belonging to at least seven inscriptions, none perfect enough to interpret. Their large number lends them importance and they deserve record because further pieces of these inscriptions may hereafter be discovered. It is noteworthy that three fragments (5, 6, 10) seem to show the letters AT, followed by what might be the upright stroke of an R, while two (4, 5) show letters resembling CIVIT or VIT. These were found in or near the Forum and a clue to their meanings may perhaps be suggested. The Forum of the Romano-British Calleva probably contained inscriptions recording the persons who erected or restored it, or any part of it, and such inscriptions would be likely to contain the name of the town Calleva Atrebatum, or of the community Civitas Atrebatum. The fragments in question may well preserve traces of this name, though we must await the discovery of further fragments before we can call this idea more than a guess. Two other details may be reconstructed from the remains. No. 7, a Purbeck marble fragment found in the Forum in May, 1868, may be supplemented *Iu]niae Be[renices optima[m] tris*, or the like. The fragment was part of either a tombstone or a record stating that some work of building or rebuilding was done in the Forum in memory of Iunia Berenice by her children. If the fragment was a tombstone it must have been brought in from the cemeteries outside the walls and used up as old building material. Finally, in fragment 8, the middle letter of the second line can hardly be anything than L, *libertus*, freedman of some master whose

## A HISTORY OF HAMPSHIRE

name ended in *nus*, Magnus, or Iulianus or the like. As a whole these fragments help us to appreciate the Romanized character of the life of Calleva. They are all now in the Reading Museum and are represented on the annexed plates (Illustration 7).

11. Tiles with words rudely scratched upon them.

(a) Tile preserved by Dr. William Davis, of 20, Dorset Square, London, and of Silchester; it was long in his father's possession (as he tells me), kept in a cabinet at Silchester with various objects found there, and was always thought to have been found on the spot. Though an erroneous impression may have grown up about the local origin of this tile (compare p. 289, note), I think it fair to include it among Silchester antiquities. A representation and account of it is given above, p. 275. The text is *Pertacus Perfidus | Campester Lucilianus | Campanus contiguere omnes*.

E. Maunde Thompson, *Handbook of Greek and Latin Palæography*, p. 211; my *Roman Inscriptions in Britain*, iii. No. 118.

(b) BIRGAI VS      (c) ... E PVELLAM      (d) .. S FECIT RIONUS      (e) .. VDII DICA VS      (f) SATIS

These are brief scratches, the first probably a name, the second perhaps a coarse allusion, the third a workman's idle record, and the fourth and fifth very likely the same. Their interest lies in the fact that they show the Latin language to have been commonly known in Silchester (p. 275). They are preserved in the Reading Museum.

b, *Ephemeris Epigr.*, iii. 126, p. 143; c, *C. I. L.*, vii. 1259; d, *Archæologia*, lvi. 123; e, f, unpublished. All seen by myself. I omit some smaller fragments of the same character.

12. Small circular object of bronze pierced work,  $2\frac{5}{8}$  inches in diameter, with a peg behind as if for a fastening. Found in 1891 in a pit on the south side of Insula i.; what was found with it is not stated in the Report of the Excavations. In the centre is an eagle with stretched-out wings, over a tiny globe; round is an inscription which seems to be—

COHOPTIM8 max IM8



SILCHESTER.



HIGH ROCHESTER.





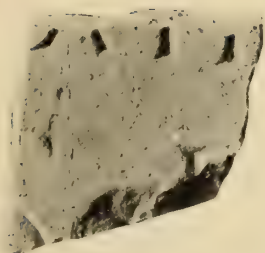
5A.



5B.



5C.



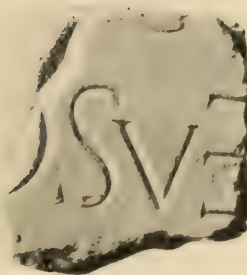
6.



7.



8.



9.



10.

FIGS. 7. INSCRIBED FRAGMENTS FOUND AT SILCHESTER (p. 281).

*To face p. 282.*





## ROMANO-BRITISH HAMPSHIRE

A similar object was found in 1852 at the Roman fort Bremenium, now High Rochester, in Redesdale, Northumberland, and I have noticed a fragment of a third in the York Museum. Troops were stationed at York and Rochester, so the thing may be military. The interpretation is doubtful. The symbols which look like 8 are presumably stops.

*Archæologia*, liii. 268 ; my *Roman Inscriptions in Britain*, ii. No. 80 ; C. I. L., vii. 1290 ; *Ephemeris Epigr.*, vii. No. 1160.

13, 14. Rings. (13) Gold ring found in 1786 and now preserved by Mr. Challoner Chute at the Vyne ; by his kindness the late Sir A. W. Franks, Mr. A. H. Smith, and myself were able to examine it and slightly correct previous accounts. The seal of the ring is formed with a small rudely incised head with the letters **VFNVS** round it ; the hoop consists of small squares on the outside, on each of which are letters, the whole being—



*Seniciane vivas in de[o]*

FIG. 9. GOLD RING FOUND AT SILCHESTER.

The whole is fourth-century work, and the concluding words, *vivas in deo*, are a common Christian formula, which would belong to the same age. The letters **VFNVS**, which are worn and may once have been **VENVS**, perhaps represent some personal name rather than that of the goddess Venus. The inscription round the hoop is an address, presumably, to the owner of the ring. The engraver seems to have miscalculated his space, and hence when he came near the end, he first attempted to put **SIN** on one facet and then failed to get **NDEO** entirely in. Such blundering is not uncommon. An alternative explanation of **INDE** as *secunde* is epigraphically impossible. It is curious that an inscription found at Lydney, in Gloucestershire, mentions a lost ring, and calls the supposed thief Senicianus, but this is a mere coincidence which dates show to have no significance. The Lydney inscription belongs to the first or at latest to the second century ; the Silchester ring is of the fourth century. The name Senicianus is, indeed, not uncommon.

*Archæologia*, viii. 449, xxvii. 417 ; C. I. L., vii. 1305 ; *Ephemeris Epigr.*, vii. No. 1171 ; *Transactions of the Bristol and Gloucester Archæological Association*, xiii. 203 ; Chute's *History of The Vyne*, p. 8.

## A HISTORY OF HAMPSHIRE

(14) Onyx seal found about 1750, now lost. Inscribed ZACP, perhaps Greek letters.

Gough's *Additions to Camden*, i. 205 ; *Ephemeris Epigr.*, iv. p. 212, No. 718.

15. On the bottom of a glass vessel, in raised letters, complete, a maker's name—

FRO  
*Fro(ntinus)*

The name of Frontinus is common on Roman glass in western Europe, usually, where datable, of the fourth century.

Copied by myself : my *Roman Inscr.*, ii. No. 82.

16. Small leaden seal or stamp, once appended by string to some document or box or sack, found in the Forum in 1868. It shows the Christian Chi-Rho, with the Alpha and Omega on each side (imperfect) and M above. Leaden seals were often used in antiquity, and are often used still to fasten up official papers or luggage at a custom-house. This seal is interesting, as showing, like the ring of Senicianus, the existence of Christianity. The Chi-Rho is used, as on fourth century coins, as an official imperial emblem. See *Archæologia*, lvi. 363.



FIG. 10.

17. Small silver seal about the size of the Roman coin called a minim, and of similar rude workmanship : in the centre a bearded head to the left, and round it an inscription which appears to be—

IVL BELLATOR VIVAS  
*Iulius Bellator, mayest thou prosper.*

Now in the Reading Museum, where I have examined it. The first three letters are doubtful, the rest tolerably certain. The lettering, the rude style and the beard combine to place this object in the first half of the fourth century. I am indebted to Mr. C. Oman for help in deciphering this hitherto unpublished seal.

18. On an 'Abraxas' gem, the letters ΙΑΩ 'Jehovah.' This shows that this curious cult (see p. 314) was not unknown in Silchester. The gem was found in the excavations of 1899.

19. Pottery, in Reading Museum, with words rudely scratched on it :

(a) PRIMANI	(b) VIRILIS	(c) VICTORINA	(d) TACIT
(e) FVR	(f) POSTUMI	(g) . . WBRIVS	(h) MINVTIONII
(i) AVIIN	(j) XIIIS		

a-e, 'Samian' ; (f) black ware ; (g) coarse grey ware, in a label ; (b) a jar of Late Celtic character ; (i) coarse white ware, a large jar ; (j) black ware. FVR 'thief' is presumably an address to the expected thief : AVIIN may conceivably be *avena*, oats ; XIIIS (13½) gives probably the capacity of the jar : the rest are the names of owners or users. All are interesting, as showing, like the brief scratches on the tiles, that Latin was commonly spoken in Silchester.



## ROMANO-BRITISH HAMPSHIRE

### 4. WINCHESTER—VENTA BELGARUM

By the side of Silchester we have to set another country-town, Winchester, Venta Belgarum. In Roman days the two places were probably very much alike. To-day they stand in sharp contrast, the one a vast open space ringed with an ancient wall, the shadow of a vanished world ; the other a crowded labyrinth of lanes and streets and churches, filled with the memories of the nearer past and with busy modern life. The problems which the two places offer to the student are no less dissimilar. The difference commences even with the name. It was only after long dispute that antiquaries agreed to identify Silchester with Calleva, but no one has seriously doubted that Winchester is Venta Belgarum. Opinion fluctuated a little in the early sixteenth century, when Venta Belgarum was occasionally placed at Bristol and Camulodunum at Winchester. But the truth was perceived even before Camden, and, except Dr. Latham, no writer of importance has questioned it since. The similarity of the word Venta to the earliest forms of the English name and the proximity of the Belgæ, as described by Ptolemy, allow no room for controversy. The significance of the name Venta is a more difficult problem. It recurs in two other Romano-British town names, Venta Icenorum in Norfolk and Venta Silurum in Monmouthshire, but nowhere else. Usually it is explained as denoting 'open or champaign country,' but Celtic scholars are unanimous in rejecting this explanation, and it will be wise to bow to their decision. Possibly, as one of them has suggested, it is a Celtic word akin to the Latin *vendo*, 'I sell,' and means 'market-town.'

Its name suggests that it, like Silchester, was Celtic before it became Roman. One or two British coins have been found there, and the 'camp' on Hills might perhaps prove, if excavated, to be a Celtic fortification ; but till further finds give more light, statements in detail will be inappropriate. Roman influences clearly reached it early, for the coins of Claudius, Nero, and the Flavian emperors are found there in considerable abundance. But we possess sadly few traces of the town which then grew up. Again the contrast with Silchester is striking. No man has dwelt on the site of Silchester since its Romano-British population left it. Winchester has been inhabited continuously for thirteen centuries and possibly since Roman days. Venta Belgarum lies buried deep beneath the dust and debris of those many years : the floors of her houses are sometimes twelve feet underground ; her features are dim and hard to discern.

Even the position of the Roman walls or ramparts is not quite certain. Most writers have assumed that they coincide with the mediæval walls, which can still be traced for nearly the whole of their course, and include an irregular quadrilateral, of which neither pair of sides is parallel and only the north-west angle approximates to a right angle. Four gates face the four cardinal points, each two gates *vis-à-vis*. The internal area, measured from gate to gate, is about 860 yards from east

## A HISTORY OF HAMPSHIRE

to west and 780 yards from north to south, and contains some 138 acres. Roman roads from Silchester and Andover, from Old Sarum and from Bitterne, seem to point respectively to the north, west and south gates, though their traces are faint near the town. On the whole there is no inherent improbability in the assumption that the walls follow in general the Roman lines, except at the south-west corner, where the mediæval castle stood. But it is needful to add that no direct proof exists of this assumption. Only one bit of wall has yet been examined. That is a bit of the east wall, parallel to Eastgate Street, and near the Durngate. Here an excavation made in 1849 revealed a mass of masonry underneath the mediæval wall and differing from it in character, built with mortar which was taken to be Roman. A freestone drain lined with lead ran through this masonry, and, according to observations then made, was so laid as to bring water out of the river into the town. This also was taken to be Roman work.<sup>1</sup> It is very probable that these remains really were Roman, but even so the course of the Roman walls is still uncertain. On the other hand, a deposit which is perhaps a burial, to be described below, has been found inside the north wall.

It is proper to add that earthworks of unknown age still exist, and mark a local boundary at Oram's Arbour and the Union Workhouse. They seem to be at least as old as Henry I.,<sup>2</sup> and might, like the Silchester earthworks, conceivably be Celtic. But in both cases excavation is needed before we can speak positively.

The area within which definite traces of Roman buildings have actually been discovered is considerably smaller than that enclosed by the mediæval walls, though it is not entirely confined within them. No pavements or foundations are recorded as occurring north of the High Street; south of the High Street we have several instances which extend from the Barracks and the railway on the west to St. Giles' on the east. No list of these instances seems to have been compiled by any former writer, and it is therefore very desirable to give one. The result will perhaps appear disappointing. We are usually told that Roman Winchester contained splendid public buildings, temples to Apollo and Concord, barracks and the like. We shall meet none of these in our list. There may have been temples and a forum, as at Silchester, but our list shows us only, as it seems, the remains of a few dwelling-houses (see map, fig. 11).

(1) On the east scarp of the deep railway cutting of the London and South-Western Railway, about 50 or 100 yards north of the bridge which carries the Romsey road (St. James Street), considerable remains were found when the railway was made in 1838. These lie near but outside the mediæval walls and west of them. They included abundant traces of tessellated pavement, a substratum for such tessellation composed of flints and hard mortar, 3 feet thick and more than 30 feet long, and many minor objects, including Samian, New

<sup>1</sup> *Archæological Journal*, vi. 398, 408; Wilks, i. 27, note.

<sup>2</sup> Wilks, i. 31, note.



[illegible][illegible]





## ROMANO-BRITISH HAMPSHIRE

Forest and other earthenware, coins of (apparently) many dates, fibulæ, and the head and the torso of two small bronze statuettes, taken to represent Hercules. Close by was a structure very like a grave, three stones standing in the chalk with two others clamped firmly on the top with iron, a coarse red urn touching one of the stones (as I read the account, inside the enclosure of the three stones), and four coins—large bronze of Trajan, Marcus, and the younger Faustina, and a second bronze of Vespasian. In 1839–40 similar discoveries were made close by, about 100 yards south of the bridge carrying the Romsey road, and close to the Barracks. The old parade field, which lay west of the Barracks, was partly cut by the railway, partly built upon, and in it were discovered foundations of flints, chalk, and mortar, coins of Trajan and later Emperors, much pottery, a damaged bronze vase, and many rubbish pits and wells. One well proved to be at least 130 feet deep; its contents comprised burnt wood, bones, oyster shells, Roman pottery, and, at 50 feet down, a ‘second brass’ of Pius. The whole series of finds indicates dwellings of some sort, which might be suburban, like those of Highcliffe (Nos. 9 and 10 below) and a villa found in 1899 outside the walls of Roman Dorchester in Dorset. For these finds see the *Gentleman's Magazine*, 1838, ii. 372, 612; 1839, i. 531; 1840, ii. 414; the Winchester volume of the British Archæological Association; Milner, ii. 270, and the Ordnance Survey maps.

(2) Sir Christopher Wren, while building the King's house in 1683 on the site now occupied by the Barracks, found a brick tessellated pavement and coins of Otacilia, Constantine and other late Emperors. See Stephen Wren's *Parentalia*, p. 325; Aubrey's MS. (in the Bodleian Library), ii. 119. This floor may be connected with the foundations discovered close by in the old parade field and just recounted.

(3) In the lower part of St. Clement's Street, at its junction with Hammond Passage, three finds of pavements have occurred. One, marked in the Ordnance maps, was found long ago on the south side of the street opposite the mouth of Hammond Passage.<sup>1</sup> A second pavement, solid walls of flint and tiles, pottery, and a few coins (Claudius I., Magnentius) were found in 1894 on the north side of St. Clement's Street, along the west side of Hammond Passage, during the construction of the present premises of the *Hampshire Chronicle*. A third pavement of plain white and grey geometrical tessellation was found about the same time in the course of drainage works in the middle of the street, opposite the ‘Hampshire House,’ which adjoins the *Chronicle* offices on the west side. All these three pavements may probably have belonged to the same house. I am indebted to Mr. W. H. Jacob and Mr. Thos. Stopher for information concerning the second and third of these pavements. Notes of the discoveries appeared in the *Hampshire Chronicle*, but in no archæological publication.

(4) On the west side of St. Thomas' Street, opposite the National

<sup>1</sup> The Director-General of the Ordnance Surveys tells me that these items rest on local information given by Messrs. Moody, Newman and Woolridge.

## A HISTORY OF HAMPSHIRE

Schools and 350 feet south from the High Street, the Ordnance Surveyors record a pavement.<sup>1</sup>

(5) At the west end of the Cathedral burial yard, where Minster Lane, Little Minster Street, Great Minster Street, and Symonds Street unite, two pavements have been found. A fine piece of mosaic, showing a geometrical pattern and dolphins, was unearthed in 1878 in the roadway at the depth of 12 feet, and is now in the Winchester City Museum. It seems to be a bit of the border to a large and elaborate mosaic which had for its general subject a pattern of interlacing squares with heads and figures, like fig. 19 (p. 308). Mr. W. H. Jacob testifies that in his boyhood a grave-digger constructing a burial vault found a piece of pavement deep down inside the burial yard. See *Journal of the British Archæological Association*, xxxv. 320; *Proceedings of the London Society of Antiquaries*, vii. (1878) 487; *Archæological Journal*, xxxv. 462.

(6) On the north side of Dome Alley, in Canon Warburton's gardens, a good but broken pavement was found, according to Mr. W. H. Jacob, 5 feet below the surface, in 1880. See the *Journal of the British Archæological Association*, xxxvi. 444.

(7) At or near the junction of Upper Brook Street and High Street, a pavement was found long ago, according to Mr. W. H. Jacob. Probably this is the same which Mr. C. Roach Smith reported to the British Archæological Association as seen by him in a cellar of the old Winchester Mint, which is generally taken to have stood near the meeting of the two streets mentioned. Near the same point massive foundations of tiles and grouted mortar were found in the middle of High Street in 1891. See the Winchester volume of the British Archæological Association, p. 463; *Antiquary*, xxiii. 191 (May, 1891).

(8) On the north-east side of Wolvesey Castle a considerable piece of coarse tessellated pavement was found at some date earlier than 1845: two bits of Samian ware also turned up at the time of its discovery, and according to some writers the mediæval walls of Wolvesey contain several Roman architectural fragments which might have been derived from a neighbouring building. See the Winchester volume of the British Archæological Association, p. 146, and the Ordnance Survey maps.

(9) Mr. W. H. Jacob records a pavement as found on the slope of St. Giles' Hill, during the construction of the Didcot, Newbury, and Winchester railway.<sup>2</sup> This is outside the mediæval walls, and must have been outside the Roman limits, whatever their precise course. Like Nos. 1 and 10, it represents a suburban residence.

(10) Further east near All Saints' Church and Elementary Schools in Highcliffe, on the south side of the Petersfield road, Roman remains were found in 1892, and recorded by Mr. W. H. Jacob. They include a late coin, Samian, New Forest, and other pottery, roof tiles, and, as I gather, traces of foundations. This too must be suburban.

<sup>1</sup> The Director-General of the Ordnance Surveys tells me that these items rest on local information given by Messrs. Moody, Newman and Woolridge.

<sup>2</sup> Tiles and pottery were also found near the south end of the tunnel of this railway.



## ROMANO-BRITISH HAMPSHIRE

Lastly, traces of an ancient building with chalk walls and very hard mortar were noticed in 1840, somewhere outside the South Gate, between the railway and Southgate Street, but no details of age or character or precise position are known,<sup>1</sup> and doubtful traces of a building were noticed in 1897 in a field near St. Bartholomew's Vicarage on the east side of Hyde Street, outside the north wall.

To these evidences of Roman building we may add a few discoveries of smaller objects, which, being movable, may have been moved since Roman days. An altar found in Jewry Street in 1854 was certainly not *in situ* (see p. 291). We have also to mention the following<sup>2</sup>: a gold coin of Honorius and pottery found in the approach to the Castle from Westgate; much Samian, New Forest and other pottery, coins, and fragments of a small bronze vase and of a glass bowl found in 1885 under the old Star Inn at the corner of Staple Gardens and High Street, and now partly preserved in the Museum; some pottery found, at  $8\frac{1}{2}$  feet deep, near the top of St. Clement's Street; some late coins, tiles, and fictilia found in 1878 during the sewerage works, close to the old South Gate, and possibly denoting a building in the immediate neighbourhood; a curious urn found in digging the foundations at the north-east corner of St. Thomas' Church; some Samian and other pottery found in Jewry Street in laying an oil duct from the railway to the gasworks; a bronze tap found in 1896 under the Market House; and, to conclude, a vast number of coins. As is inevitable, these latter have only been casually recorded, and we can now do no more than state that they abound and cover all periods of Roman rule in Britain. Silver Street may well owe its name to unrecorded discoveries of such coins. Nor, apart from the coins, must it be supposed that our brief list of other minor objects is in any sense complete: hundreds of such objects must have been found and forgotten. But the list gives authentic instances, and is interesting further because the objects noted in it, like the pavements enumerated above, have been found almost entirely to the south of High Street.

Evidences of Romano-British burials have been noted on three sides of Winchester, and, in every case but one (No. 4), outside the mediæval walls.

(1) North and north-west of Northgate, near Hyde Street and the Roman roads running northwards. About 1780, twelve or more urns in a row were discovered in digging for a cellar in the garden of the then Hyde Abbey school house, afterwards a museum and now the Soldiers' Home, near the corner of Hyde Street and Hyde Close: twelve passed into the possession of a Mr. Gustavus Brander of Christchurch.<sup>3</sup> Close by, urns were found in constructing Mr. Wyeth's (now Welsh's)

<sup>1</sup> *Gentleman's Magazine*, 1840, ii. 645.

<sup>2</sup> An urn found under the new wing of the George Hotel and preserved there as Roman, may well be of later date.

<sup>3</sup> Milner, ii. 238; *Vetusta Monumenta*, iii., part i. p. 14. Mr. Brander possessed also seven Roman inscriptions, and after his death it seems to have been supposed that, like the urns, they must have been found in Winchester. Their epigraphic character is, however, such that this idea is out of the question. They resemble closely inscriptions found in Rome,

## A HISTORY OF HAMPSHIRE

brewery, and some are still preserved there. Further north, human bones and vases of dark Roman pottery were found in 1842 in forming a plantation a few yards west of Highfield Lodge, and a skeleton interred in the chalk 3 feet below the surface, with twelve 'small brass' coins of Valentinian I., Valens and Gratian (364-383 A.D.), was found in 1843 in a field near Hyde Abbey.<sup>1</sup> Similar discoveries have been made since in the same district. Thus in 1897 tiles, pottery, and coins of Marcus, Gallienus, Constantine, etc., were found in a field near the vicarage, on the east side of Hyde Street. The tiles may represent a tiled tomb, unless a suburban building stood here.

(2) On the west side of the town. A burial which has been already described (p. 287) was found in making the railway cutting in 1838. Further south, several scattered skeletons and five coarse urns were found in 1840, when the south side of St. James' Lane was widened to give access to the newly opened Cemetery. One of the urns was 3 feet round; they contained burnt human bones and ashes, two small fibulæ, and a copper coin of Magnentius.<sup>2</sup>

(3) On the slopes of St. Giles, east of the town and across the river. Burials have often been noticed on this hillside. In 1789 a 'range of sepulchres' was discovered at 15 feet underground, near Durngate Bridge at Magdalen Hospital Cottages. Nine graves were opened, all of which contained human bones, while five contained plain dark pottery. One grave which had no urn in it yielded a fibula, buckle, spur, iron ring, and an undecipherable Roman Second Bronze coin, perhaps of the first or second century.<sup>3</sup> A little south of the preceding, on the slope of the hill, Romano-British graves were found in 1840 in the erection of cottages in Water Lane, and in 1847 in the construction of the gasometer.<sup>4</sup> An urn with cover and burnt bones, belonging to the latter find, is now in the Museum. Further up the hill, in St. John's Street, two lead coffins were found in the sewerage works of 1878, about 4 feet below the surface. One was a double leaden coffin additionally protected with iron bars, and contained the skeleton of a woman; the other was a single coffin of lead, which had been, as it seems, originally protected by wood, and contained a male skeleton, and a coin of Constantine at the head.<sup>5</sup> Portions of these are in the Museum.

and four of them are known to have been found there (*Corpus Inscriptionum Latinarum*, vi. 18284, 18436, 18772, 23243); the other three are unpublished, but doubtless of the same origin. None of them is of special interest. They are at present in the possession of Lord Northbrook, to whom I am indebted for information concerning them. More burial urns were found in 1849 at Hyde Abbey School (then a Museum). See *Archæological Journal*, vi. 194.

<sup>1</sup> *Gentleman's Magazine*, 1842, i. 309; 1843, ii. 131; Winchester volume of the British Archæological Association, p. 146.

<sup>2</sup> *Ibid.*, 1840, ii. 644; Winchester volume of the British Archæological Association, p. 146.

<sup>3</sup> *Vetusta Monumenta*, iii. part i. p. 13, with plates.

<sup>4</sup> *Gentleman's Magazine*, 1840, ii. 450; *Journal of the British Archæological Association*, iii. (1847), 334; *Archæological Journal*, vi. 183.

<sup>5</sup> Baigent, *Hampshire Chronicle*, 1878; C. Roach Smith, *Collectanea Antiqua*, vii. 192; *Proc. Soc. Antiq.*, second series, vii. (1878) 487.



## ROMANO-BRITISH HAMPSHIRE

(4) Lastly we have perhaps a burial found within the walls. This discovery was made in 1838, while levelling ground behind the Corn Exchange in Jewry Street. At 5 feet below the surface a small earthen vase was found under a stone, embedded in earth or clay, surrounded by flint and chalk lumps and burnt wood. The vase was  $4\frac{1}{2}$  inches high, of a reddish brown ware, and is said to have contained earth. The stone on the top had been put there intentionally as a cover, and the whole has the look of a burial. Some Roman coins were noticed near, but were not thought to be connected with it, and the exact meaning and age of the find must remain doubtful. Its date is presumably Roman, and its position 120 yards inside Northgate is notable, but it is in no sense proof that the site of the Corn Exchange lay outside the Roman limits of Winchester.<sup>1</sup>

Two more items will complete our survey of the Roman antiquities of Winchester. The first of these is the one Roman inscription found in the town.<sup>2</sup> It was discovered in 1854 near the south end of Jewry Street, and when found was serving as a stone in the foundation of the street boundary wall of the old county jail, then being demolished; now it is in the British Museum, where I have examined it. It is an altar of blue compact sandstone, perhaps from the Binstead quarries in the Isle of Wight, and measures 19 inches in height by 8 inches in width.<sup>3</sup> Except for a few letters, the text is perfect: the gaps in the second and third lines are probably due to defects existing in the stone before it was inscribed.

MATRIB  
ITALÆSGER  
MANIS  
GAL BRIT  
ANTONIUS  
CRETIANVS  
FCOSREST

*Matrib(us) Ital[i]s Germanis Gal(lis) Brit(annis)  
[A]ntonius [Lu]cretianus [b(ene)]f(iciarius) co(n)s(ularis)  
rest(ituit).*

‘To the Italian, German, Gallic, and British Mothers, restored by Antonius Lucretianus, beneficiary of the governor (of the province).’

The Matres were a triad of Celtic or Teutonic goddesses who were much worshipped during the first three centuries in Roman Gaul and Germany, and who retained a place in the folklore of those countries even after the spread of Christianity. They form one of the numerous elements in Roman provincial life which Roman literature never mentions, and which we know solely from inscriptions. Their cult was very popular with soldiers, and soldiers probably brought it from the

<sup>1</sup> *Gentleman's Magazine*, 1839, i. 301. See above, p. 286. The remains found under the Star Inn in 1885 have been styled sepulchral (*Journal of the British Archæol. Assoc.* xli. 321), but, I think, wrongly.

<sup>2</sup> Prof. Hübner, in the *Corpus Inscriptionum*, vii. 1260, includes a tile with the letters IKLM found in 1845. But this is plainly not Roman, nor does the writer from whom he cites it say that it is Roman. See S. Isaacson in the *Journal of the British Archæological Association*, i. 312.

<sup>3</sup> C. Roach Smith, *Collectanea Antiqua*, vi. 41; Baigent, *Journal of the British Archæological Association*, xi. 82; C. I. L., vii. 5.

## A HISTORY OF HAMPSHIRE

Rhine to Britain, where it became widely diffused, though it is naturally commonest in the military north.<sup>1</sup> In the present case the worshipper is shown by his title 'beneficiarius' to have been a soldier, and the epithets, 'Italian, German, Gallic, and British,' which he applies to the Mothers seem to refer to his comrades. Men of Italian, German, Gallic, and British birth were serving with him in the legions, and therefore the Mothers whom they worshipped received the names Italian, German, Gallic, and British. What brought him to Winchester we cannot tell, for his office is an obscure one. 'Beneficarii' were legionaries who gained from various higher offices or officials, in this case from the governor of the province, the favour of promotion (*beneficium*) to a special service, but the character of this special service is unfortunately not known. It was not merely garrison duty or fighting in the field; the emblems of the 'beneficiarius' suggest an office and clerks, and his work certainly took him sometimes into districts where no troops were stationed. Now and again we find him at towns where many roads meet. It was thus, perhaps, that Lucretianus came to Venta, where many roads meet. We do not know when he came. The lettering of the inscription has been dated to the early part of the second century, but lettering is deceptive. The national titles applied to the Matres supply a better clue, though not a perfect one. They imply, as we said, that Lucretianus' legionary comrades were Italians, Germans, Gauls, and Britons. Now the period when we should most expect to find a legion quartered in Britain and recruited from these countries, is the latter part of the first century.<sup>2</sup> But a later period is not impossible, and an inscription set up by a stray 'beneficiarius' at Dorchester in Oxfordshire probably is a good deal later.<sup>3</sup>

The second item which we have to quote takes us into another age and atmosphere. In the fourth century we find in a list of Roman officials which chance has preserved us,<sup>4</sup> an officer entitled 'procurator gynaecii in Britannis Ventensis,' that is, 'administrator of the imperial weaving works at Venta.' State-owned works of this sort existed in the fourth century in many provinces; they probably provided cloth for the imperial household and for public purposes, not for sale in the open market, but their size and internal organization are unknown to us. Such a 'gynaceum' existed at Venta, and we may safely identify this Venta with Venta Belgarum. The two other towns of that name—the one in Norfolk, the other in Monmouthshire—lie far away from districts fit for sheep, and are on the outskirts of the province: one of them, indeed, was dangerously exposed to Saxon pirate raids. We may suppose, therefore, that in the fourth century there existed in or round Roman

<sup>1</sup> *Archæologia Aeliana*, xv. 314, and references there given.

<sup>2</sup> Mommsen, *Hermes*, xix. 19 note; Tacitus *Agricola*, 32.

<sup>3</sup> *Corpus Inscr. Lat.*, vii. 83; compare vii. 1095, belonging to the middle of the second century.

<sup>4</sup> *Notitia Dignitatum Occident.*, xi. 60. The list dates from about the time when the Roman rule in Britain ceased, but is doubtless retrospective.



## ROMANO-BRITISH HAMPSHIRE

Winchester, imperial weaving works with a procurator to administer them.

Such is the total of what we know concerning *Venta Belgarum*. It was, we may say, a country town like *Calleva Atrebatum*, perhaps a little larger, if the mediæval walls represent the ancient area, perhaps a little more important, a little more in touch with Roman administrative life. But the picture is dim, at the best, and those who prefer clearness to truth have tried to add one bright definite feature. Winchester, we are sometimes told, was the capital of that King Lucius who introduced Christianity into Britain in the second century; the present cathedral stands on the site of the first Christian church built in Britain, and Constantine added a priestly college, of which the ruins are still visible. So far the tale, as old as the fifteenth-century monk of Winchester, Thomas Rudborne, and repeated as lately as the last edition of Milner's *History*. It is, of course, false. Lucius is mythical, as scholars of all denominations now agree: the Romano-British Cathedral is a mere imagination: the supposed ruins of Constantine's College date in reality from the Decorated period of mediæval architecture. Vestiges of Romano-British Christianity might well occur at Winchester, as at Silchester, but none have hitherto been discovered.

### 5. THE VILLAS AND FARM BUILDINGS

From the country towns we proceed to the country outside them. The soil of Hampshire has revealed to us many 'villas' and evidences of Romano-British rural life; doubtless it still hides others for future generations. Those which are known to us are distributed all over the area of the county, except two districts—the extreme north and the south-west. In the north, the high land which stretches from Inkpen Beacon towards Kingsclere must always have been somewhat unattractive to settlers, and the neighbourhood of Silchester seems, as its ancient name suggests, to have been woodland, as it is to-day.<sup>1</sup> In the south-west, the barren sandy tract between Southampton and the Dorset boundary was then, as now, a lonely expanse of forest or heath, untraversed by Roman roads, untouched by Roman life, and sheltering within its recesses a tradition of the ancient native art. Throughout the rest of Hampshire we meet with the remains, in greater or less abundance, of villas and other buildings connected with country life, and the Isle of Wight shows the same features. Very few of these remains have been adequately excavated; of many we know too little to decide upon their precise character. But it may not be amiss to attempt, what has never been attempted before, to tabulate the principal recorded discoveries. Thus only can the reader acquire some faint conception of this vanished rural civilization; thus only can future finds be fitted into their proper place in the topography of Hampshire. For convenience of classification I shall distinguish four groups of remains—those found

<sup>1</sup> *Calleva* is 'the town in the wood,' p. 272.

## A HISTORY OF HAMPSHIRE

near Andover, those lying north-east of Winchester towards Alton and Basingstoke, those in the southern half of the county, and a few in the Isle of Wight. I have visited many of the sites myself.

I. The vicinity of Andover, for five or six miles eastwards and northwards and westwards, is very rich in remains of villas and other buildings. And not, perhaps, unnaturally. It is a comfortable lowland, and provided with good communications with the rest of Britain, for two Roman roads cross at right angles a mile north of Andover—the road from Silchester to Salisbury, and the road from Winchester to Cirencester. No settlement seems to have grown up at this ‘Quadri-vium,’ nor are the villas of the vicinity situated especially near the roads, but the latter doubtless served the purposes which a railway might serve to-day. We will enumerate the principal discoveries, commencing at the north-west of the area under consideration.

(1) On Lambourne’s Hill, near Redenham, in the north of the

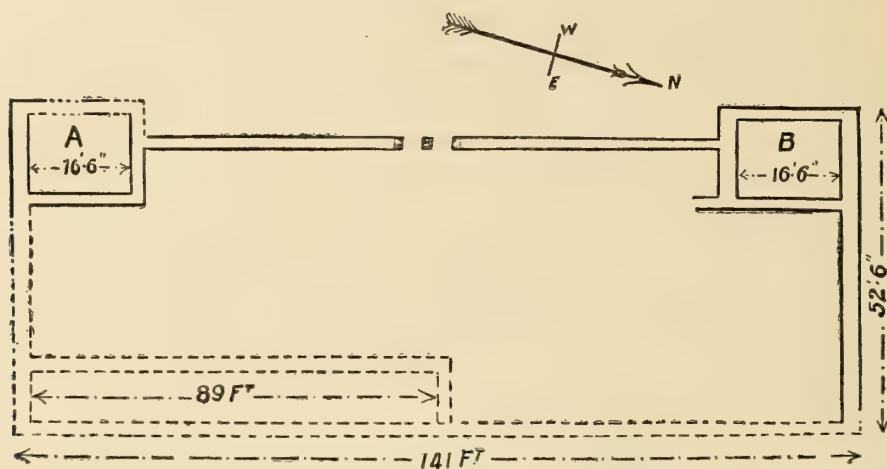


FIG. 12. FARM BUILDING NEAR REDENHAM.

parish of Fyfield, on both sides of a lane which runs up from Redenham. Excavations made in 1830 by the landowner, the late Sir John Pollen of Redenham, on the west side of the lane revealed a hypocaust, some flooring of red and grey tesserae, stucco painted with green and grey scrolls, pottery, and a coin of Constantine. Further excavations in 1850 showed, adjoining the hypocaust, a range of four rooms, in all 17 by 40 feet, with some plain red and white pavement and a few roofing slates. The remains, after being left open for a long time, were ploughed up about ten years ago and most surface indications removed. In 1899 the Rev. George Engleheart, of Appleshaw, carefully excavated a detached building on the opposite (east) side of the above-mentioned lane. It is a structure of 141 by 52 feet, with two small wings, which opens towards the previously discovered buildings with a double gateway 11 feet wide. Two large blocks of green sandstone were found *in situ*, one on each side of this gateway, with mortise-holes for the gateposts, and between these blocks lay parts of a column of the same stone,



## ROMANO-BRITISH HAMPSHIRE

a well-cut capital and a base. The walls of the building were about 2 feet thick, and consisted of flint, but in some places, indicated by lighter colouring on the annexed plan, the flintwork had all been ploughed away, and only the foundations of rammed chalk and clay remained. They were apparently not substantial enough to have borne a heavy superstructure, nor were roof tiles or traces of flooring found in the body of the building. On the other hand, the two smaller rooms on the wings, marked A and B in the plan, were full of roofing slates; A contained traces of a red cement floor, and B showed signs which Mr. Engleheart interpreted as a rude hypocaust.<sup>1</sup> A thick deposit of decayed wood all over the building suggested that timber was largely used in it. A few smaller objects were found—bits of pottery, a knife, and coins of Tetricus, Claudius II. and Carausius. Doubtless, as Mr. Engleheart observes, we have here a barn or cowshed or other farm building connected with the dwelling-house of which the hypocaust and rooms found west of the line would be the relics. The ground plan of the whole series of buildings may well have resembled that of Clanville (No. 4) and Brading (No. 42), a small dwelling-house with an enclosure in front and detached farm premises on the right and left of the enclosure.<sup>2</sup>

(2) At Great Shoddesden in the parish of Kimpton. Here Mr. Engleheart has found a small building with a plain rammed floor, probably a hut, about a quarter of a mile south-west of the hamlet, and abundant stone roofing-slabs.

(3) West of Appleshaw in the Great Copse and in Chapel Copse. In the former Mr. Engleheart and Mr. C. F. Wood, in 1882, found traces of a small hut with a rude hypocaust. Pottery, tiles and coins have been found all over the wood and can still be detected by the visitor.<sup>3</sup>

(4) At Clanville, in the parish of Weyhill, on the north side of the lane between the hamlets of Clanville and Ragged Appleshaw. Here Mr. Engleheart excavated in 1897 the larger part of a 'villa.' Its general scheme resembles those of Redenham and Brading (No. 42), and shows a dwelling-house and two other detached buildings facing three sides of a roughly rectangular yard, 150 by 200 feet in size. The dwelling-house is on the west side. It occupies a parallelogram of 52 by 96 feet, and its internal arrangements are remarkable. The chief part of it is a columned space of 30 by 60 feet, with an earthen floor. On the longer side of this is a narrow corridor cut in two by a cross wall

<sup>1</sup> Similar wings appear in some of the rude farmhouses of Roman Germany and northern Gaul; they mostly contain cellars, and this may have been the case with B above. *West-deutsche Zeitschrift*, xv. 1-18.

<sup>2</sup> *Archæological Journal*, vii. 183; information supplied by Mr. Engleheart. Fragments from Redenham are in the Winchester Museum, but the inscribed tesserae mentioned in *Archæologia*, lvi. 2, are really mediæval from elsewhere.

<sup>3</sup> *Archæologia*, lvi. 2. The account in the *Journal of the British Archæological Association* (xxxviii. 97) is, I am told, not quite accurate.

## A HISTORY OF HAMPSHIRE

and partly paved ; at its north end is a room paved with grey *tesserae* and containing an open fireplace ; at its south end are three rooms, of which the middle one had an ornamental mosaic floor, now defaced. At a date supposed to be subsequent to its first construction, four small rooms were added by walling off parts of it : of these rooms, two possess hypocausts, three have tessellated floors, and the fourth a pavement of *opus signinum*. The result of these additions is to make the columned space into a central court, and to give the whole edifice a certain super-

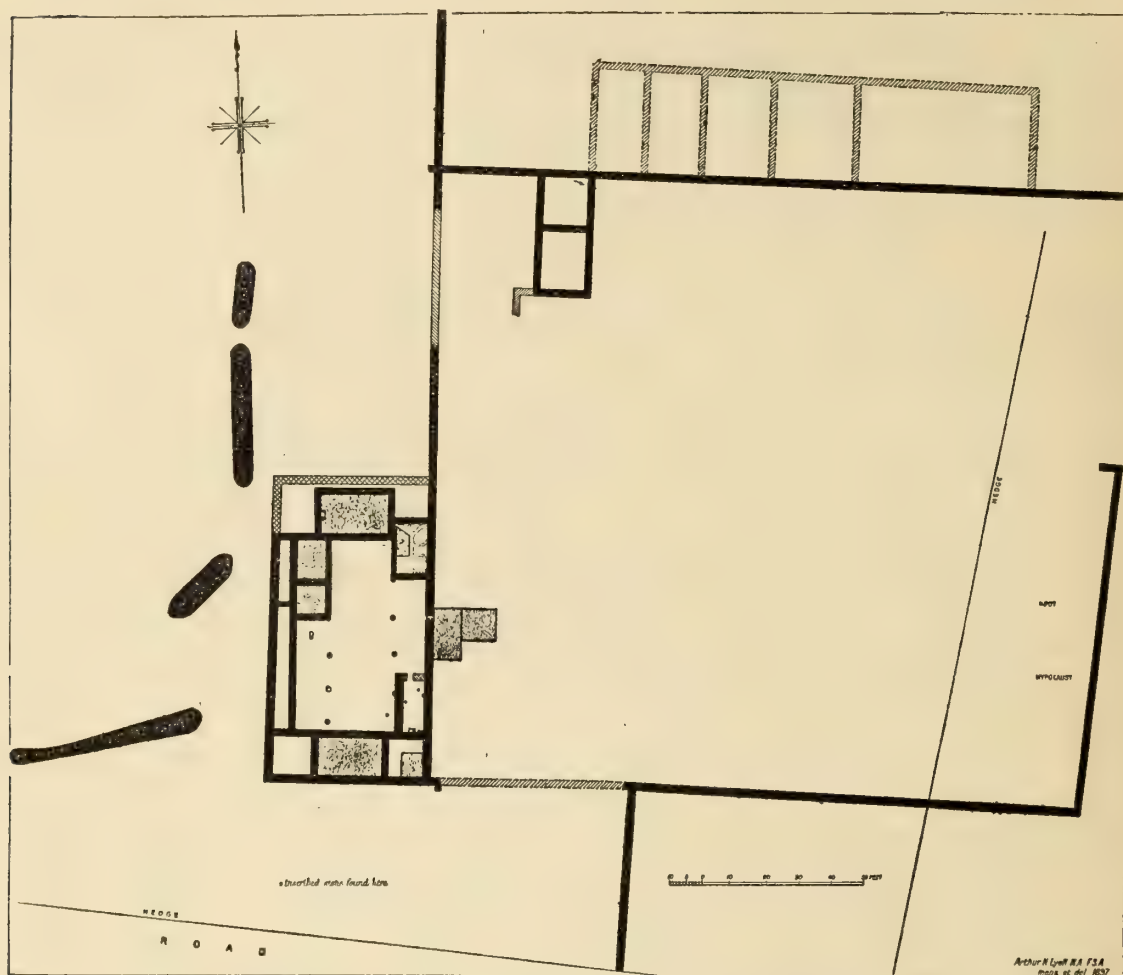


FIG. 13. PLAN OF A ROMAN HOUSE AT CLANVILLE, ANDOVER.

ficial resemblance to the Italian house, in which the rooms were grouped round and looked into one or more small internal *atria* or peristyles. The original building may, however, have been more like that found at Castlefield (No. 9), and we may suppose a structure of that type to be the germ out of which developed the dwelling-house shown on the plan. We shall meet a similar building at Carisbrooke (No. 45 below) : we may compare also a villa excavated in 1786 at Mansfield Woodhouse, in Nottinghamshire (*Archæologia*, viii. 364).

An irregularly square block of yellow sandstone, 14 inches high by



## ROMANO-BRITISH HAMPSHIRE

12 inches wide and deep, was found lying loose in the columned space. It bears an inscription, and is now preserved at Clanville, where I have copied it.

MAVR  
KARINO  
NCAES

*M(arco) Aur(elio) Karino n(obilissimo) Caes(ari).*  
To Marcus Aurelius Carinus, Heir Apparent.

Carinus, son of Carus, received from his father in 282 the title of Cæsar, which at that time denoted somewhat the same as Heir Apparent or Crown Prince, and became Emperor in 283. This stone was therefore inscribed in 282–283. Externally it resembles the stones at Bitterne, which we generally call ‘roadstones’ (p. 336) ; but, as Clanville is two or three miles from any Roman road, it must perhaps be regarded as purely honorary.<sup>1</sup> The use of K for C recurs on other inscriptions of Carus and Carinus.

The other two buildings of the ‘villa’ need fewer words. That on the north is a long irregular structure, 180 by 33 feet, divided into many compartments ; the absence of pavement and roof-slates and the presence of decayed wood suggested that it was a timbered farm building. That on the east, about 40 by 110 feet, also contained several rooms : one had a hypocaust, and all seem to have been roofed.

The coins found at Clanville include two of Domitian and one of Marcus, the latter very fresh, but are otherwise entirely of the later Empire (*circa* 250–350 A.D.), and agree therefore with the date of the inscription in showing that the villa was occupied in the late third or the fourth century.

The smaller finds include painted stucco from the walls, window-glass, Samian, New Forest, Caistor and other pottery, bracelets of Kimmeridge shale, iron and bronze rings, and the like.<sup>2</sup>


(5) About half a mile south of the Clanville villa, between Ramridge House and Penton, Mr. Engleheart reports a site marked on the surface by debris of tiles, bricks, slates, pottery. It has not, however, been yet explored, except tentatively ; probably, he thinks, it is a hut.

(6) On the Ludgershall and Andover high road, a mile north of Weyhill, on the east side of the road. Here fragments of stone roof-slabs, flue tiles and bricks are noticeable on the surface of the field, and Mr. Engleheart, in digging a trial trench near the edge of the road, in November, 1897, made a very remarkable discovery. He found a cement floor, a shallow pit sunk through the floor, and in the pit a set of thirty-two pewter vessels, buried intentionally. They are of all shapes and sizes, large flat dishes, drinking cups, bowls, small dishes, all apparently intended for use at the table, either for eating or drinking (fig. 14). Many are ornamented with intricate geometrical patterns, incised by a wedge-shaped punch, and emphasized by being filled with a bituminous material which serves for niello (fig. 15). The metal is an

<sup>1</sup> It may possibly have been used for one of the columns, but the certain column bases which have been found are of harder stone and larger circumference (58 against 46 inches).

<sup>2</sup> *Archæologia*, lvi. 2–6, and information supplied by Mr. Engleheart. The finds are to be preserved in a small local museum.

## A HISTORY OF HAMPSHIRE

alloy of tin and lead, varying from practically pure tin to two parts of tin to one of lead. One vessel has scratched on it the word **VICTRICI.** Another, more interesting, bears the Christian monogram , and is evidence that the villa was inhabited by Christians and in Christian times, that is, in the fourth century. An oval dish with a fish figured in the centre (fig. 11) may perhaps be additional evidence of this fact. As we have remarked above (p. 277), the occurrence of Christians in the towns or 'villas' of southern Britain is testified by a great deal of evidence, with which the Weyhill discovery well harmonizes. It also provides a date for the occupation of the site. We have evidence that men dwelt here about the same time as we know that they dwelt at the Clanville 'villa,' and Mr. Engleheart has observed that some painted stucco found on the Weyhill site shows precisely the same pattern—clusters of red flower buds—which he found at Clanville. Similar finds of pewter vessels have been made in many parts of southern England, and it is curious that, so far as they are datable, they seem usually connected with the fourth century. Fourteen large dishes were found, for instance, at Manton near Marlborough in 1884, and with them coins of A.D. 360–410. It would seem that pewter vessels were commoner in the fourth than in the preceding centuries. The Weyhill pewter vessels are now in the British Museum, where I have examined them.

Another portion of the villa in which the pewter service was buried was found shortly afterwards by Mr. Engleheart, about 50 yards distant, in the same field. This is a small bath-house, isolated and self-contained, consisting of a heatable room with a tessellated floor and hypocaust, and a bath adjoining. Similar detached bath-houses have been detected near other Roman villas.<sup>1</sup> They may have been connected with the dwelling-house by a wooden corridor, but no trace of such connection has ever been discovered. Possibly the isolation was considered to be safer for summer use, when the ordinary warming apparatus of the house would not be employed, while the bath would still be required. In summer, too, the awkwardness of passing from a hot bath to the open air would be inconsiderable.<sup>2</sup>

(7) At Thruxton, on the north side of the high road towards Weyhill, and about half a mile east of the village, near Eastfield. Here part of a building was discovered in 1823, measuring 50 by 85 feet, with walls constructed in the usual manner of flints and mortar. No plan of it exists. It is described as if it were one large room. The walls of this, we are told, 'had fallen inwards and buried a chalk floor in which were placed two rows of upright stones, five in each row, of a large size and perfectly smooth on their upper surfaces, being of polished freestone. These rows of stones were 21 feet apart. The lower row passed from the corner of the pavement: the upper row was exactly 21 feet from the pavement (to be described), and ran parallel to the lower. The

<sup>1</sup> See, for instance, the plan of a little villa at Frilford, near Abingdon, in the *Archæological Journal*, liv. (1897) 341.

<sup>2</sup> *Archæologia*, lvi. 1–20; information given by Mr. Engleheart.



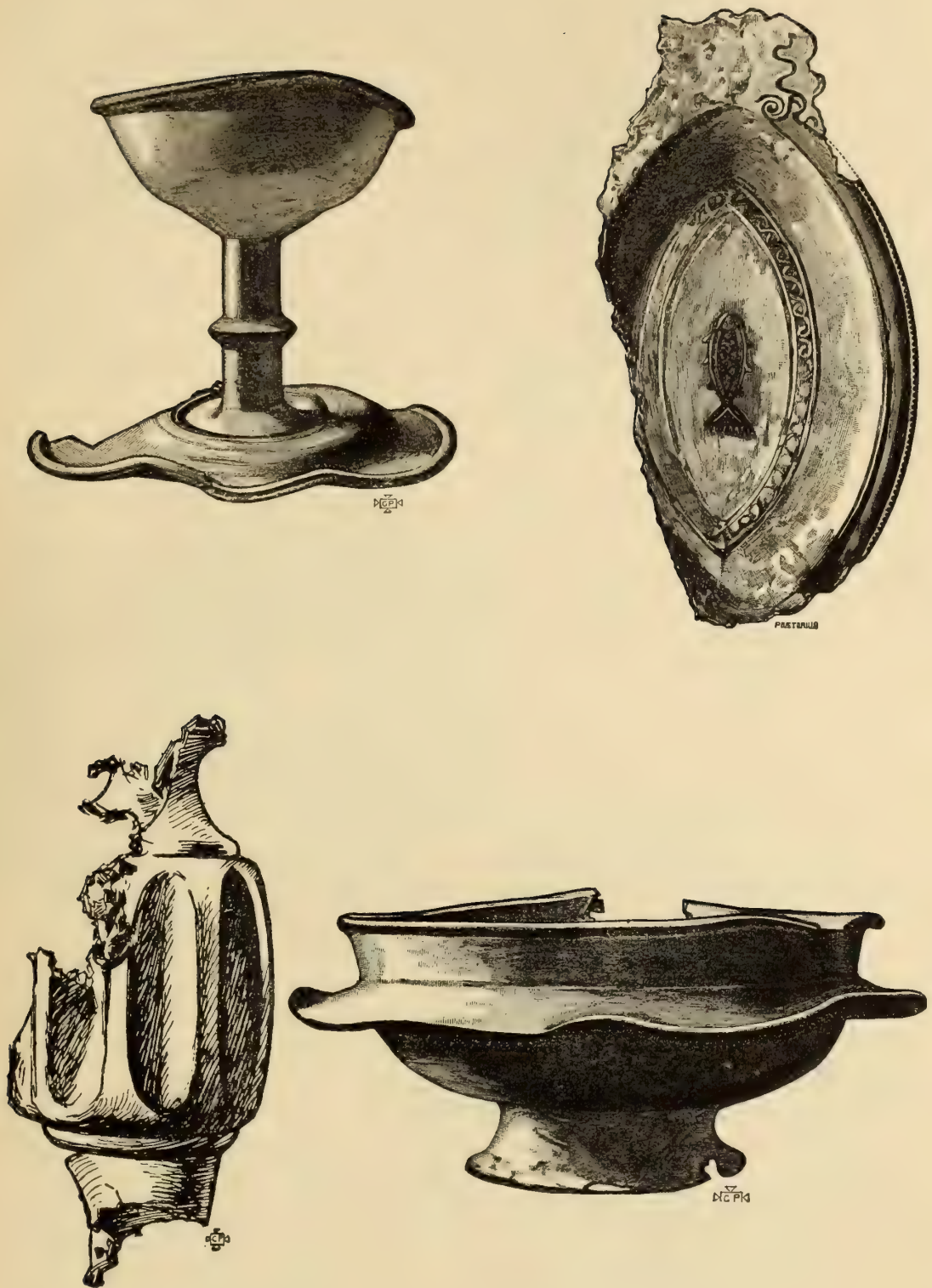


FIG. 14. PEWTER VESSELS FROM THE 'VILLA' NEAR WEYHILL (p. 296).

## A HISTORY OF HAMPSHIRE

stones were 13 feet apart.’<sup>1</sup> This description suggests a columned space or hall, like that noted at Clanville, with a room in one corner, but it is too vague to insist upon. Among the ruins were found roof-slates, bits of painted stucco, a terra-cotta candelabrum, coins of *circa* 250–350 A.D., and three skeletons, but the principal discovery was a fine mosaic pavement. This occupied a corner of the room or building excavated, and when perfect measured 16 feet each way. Its centre is a small, round panel showing the figure of Bacchus seated on his tiger—a common element in mosaic pavements. This is surrounded with a broad circle of elaborate geometrical ornament, including eight conventional heads, and that in turn is framed in a square of somewhat similar though rather simpler ornament, the corners of the square being filled with heads. On two sides of the square an inscription was worked in blue, red and yellow; that on the side above the head of Bacchus is still legible, and reads:—

QVINVS NATALIVS NATIALINVS ET BODENI  
*Quintus Natalius Natalinus et Bodeni*

but that on the lower side has been wholly destroyed except for the letters V and O, which are respectively the fourth from the end of the line and the last. We may suppose that Q. Natalius Natalinus owned the ‘villa’ and put in the mosaic, but we shall do well to refrain from conjectures as to the meaning of *Bodeni* or the completion of the destroyed line of lettering. Through the exertions of Mr. Engleheart this pavement was taken up in 1899 and presented by the owner of the site to the British Museum.<sup>2</sup>

(8) At Abbott’s Ann, in Minster Field, on an elevation about a mile and a quarter south-west of the village. A ‘villa’ was discovered here and partly explored in 1854, but no account of the results has been preserved. The finds appear to have included parts of a good mosaic pavement, presented by the landowner, the Hon. and Rev. S. Best, to the British Museum; an iron candelabrum, some pottery, tiles, painted stucco, window and other glass (some of it good), bits of foreign marble, etc., now in the Andover Museum, and about thirty coins covering the period 37–350 A.D., but the great majority of them dating from 250–350 A.D. Obviously the ‘villa’ was a noteworthy one. Mr. Engleheart tells me that, according to a local tradition, which he sees no reason to doubt, an untouched wing of this house, or another house hard by, contains a fine mosaic with a *biga* depicted on it.<sup>3</sup>

<sup>1</sup> Dr. Ingram in the Salisbury volume of the Archæological Institute, 241–242. This is the sole account of the building: other writers mention only the pavement.

<sup>2</sup> *Gentleman’s Magazine* (1823), i. 452, 559; (1823) ii. 229 (sketch of the candelabrum); *Archæologia*, xxii. 50; the Salisbury volume of the Archæological Institute, 241–247 (coloured drawing of the mosaic); *C.I.L.*, vii. 3. The site marked for the ‘villa’ on the Ordnance Survey map, near the church, seems to be wrong, but Mr. Engleheart tells me that there are earthworks there and bits of Roman tile and pottery may be picked up.

<sup>3</sup> Wilks, iii. 161, with illustrations of the mosaics, on the plate opposite p. 191; C. Roach Smith, *Gentleman’s Magazine*, 1866 (ii.) and 1867 (i.) 359, and *Collectanea Antiqua*, vi. 247, with a cut of the candelabrum; Jos. Stevens, *History of St. Mary Bourne*, p. 68. The whole of the masonry found in 1854 is said to have been taken away to build latrines for the village school.



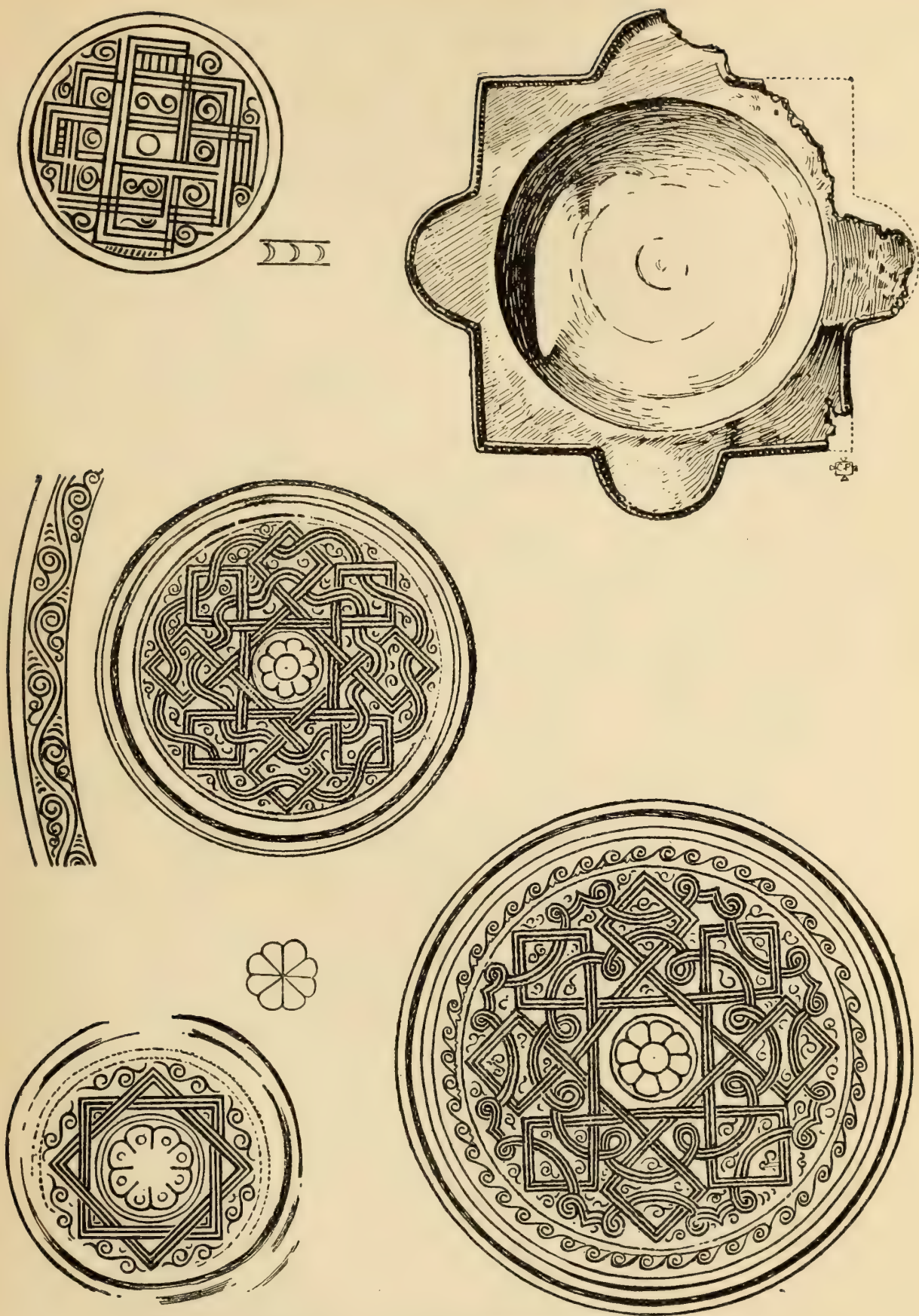


FIG. 15. ORNAMENTATION OF PEWTER VESSELS FOUND NEAR WEYHILL (p. 296).

## A HISTORY OF HAMPSHIRE

(9) At Castlefield on Tinker's Hill, Andover Down Farm, about two and a half miles east of Andover. Here, in 1867, Mr. C. Lockhart and the Rev. E. Kell excavated a curious building. It appears to be an oblong of 41 by 66 feet, walled round on all four sides with an ordinary flint and mortar wall, and notable for two parallel rows, each of seven stone bases (A–N), running lengthwise along its interior. Two open fireplaces (p q) and three sunk furnaces (r s u) also find place inside it. At the north end is a small annexe, or separate room, measuring 14 by 22 feet, and containing two open fireplaces (o r). Many roof-tiles were found, indicating that at least a considerable part of the building was roofed. The flooring was of rammed flint and chalk. No trace of window-glass or wall-plaster was noted, nor anything suggestive of luxury or comfort. The smaller finds include bottle-glass, a bronze ring, a lead weight, many iron nails and other iron fragments, including one

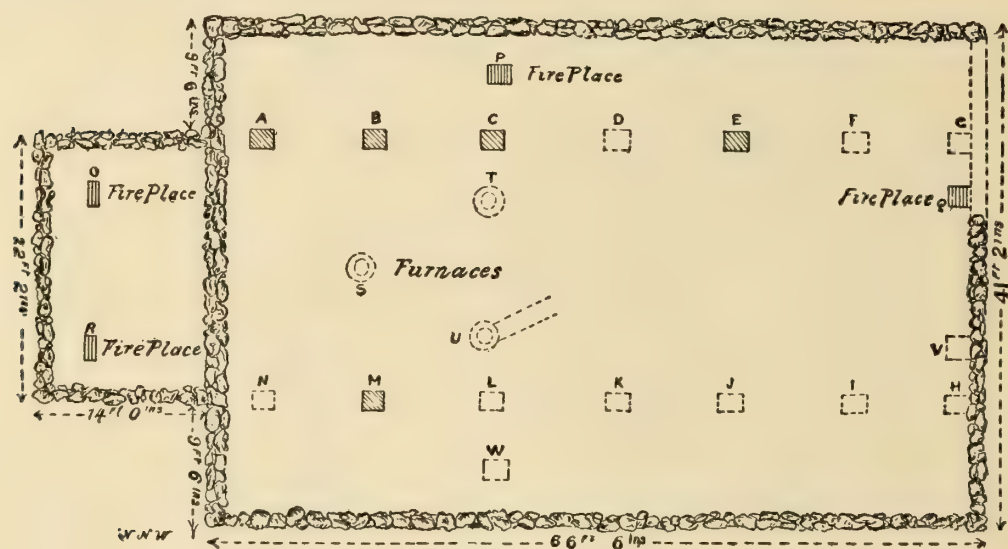


FIG. 16. BUILDING AT CASTLEFIELD.

piece described as a 'woolstapler's comb' ; Samian, New Forest, and other pottery ; animals' bones, and a few coins of the period A.D. 238–378. Most of the noteworthy objects are now in the Andover Museum. The explorers suggested that this structure may have been a *deversorium*, or inn for travellers, along the two Roman roads which cross a couple of miles away. It does not, however, possess any features which support this hypothesis, and it is situated inconveniently far from the roads in question. Similar buildings have been noted at Hartlip, in Kent, and at Ickleton, in Cambridgeshire,<sup>1</sup> in each case in the immediate vicinity of a 'villa' ; we have observed above that the buildings at Clanville and Thruxton (p. 296) show distinct resemblances, and West

<sup>1</sup> The Hartlip villa is described, with a plan, by C. Roach Smith, *Collectanea Antiqua*, ii. 9 ; the Ickleton villa by R. C. Neville (afterwards Lord Braybrooke), in the *Journal of the British Archaeological Association*, iv. 365.



## ROMANO-BRITISH HAMPSHIRE

Dean seems to supply another instance (No. 38). Perhaps we have here a primitive type of building, differing widely from the usual 'corridor houses,' and derived from a different source.<sup>1</sup>

According to a writer in the *Intellectual Observer*, another building was found 256 feet west of the one just described. It seems to be small, and yielded pottery, roof-tiles, iron nails, 'third brass' coins of Constantine, and animals' bones ; but it was excavated only in part.<sup>2</sup>

I was informed on the spot that cement, tiles, etc., indicating yet another building, were dug up half a mile south-west of Castlefield, between the modern high road and Harewood Forest.

(10) At Finkley Farm, half a mile south of the Roman road which runs yards west of the Devil's Dyke, in a field anciently Nuthill Copse. Here Sir R. Colt Hoare noticed tiles and pottery on the surface, and Dr. Jos. Stevens, in 1871, excavated a small dwelling-house. It is, in all, a rough parallelogram of some 60 by 85 feet in extent. Its southern half is a courtyard, or yard, with sheds. Roof-slates were found in it, as though it had been partly roofed. The portion of it which is furthest from the rest of the building is pitched with flints, and there are two entrances into it, each 6 to 7 feet wide. The northern half consists of rooms. Three adjoin the yard, of which the middle one is paved with brick *tesserae*, and has an open brick hearth in the corner; two or three other rooms (the partitions are not quite plain) lie behind. These rooms, or some of them, were ornamented with

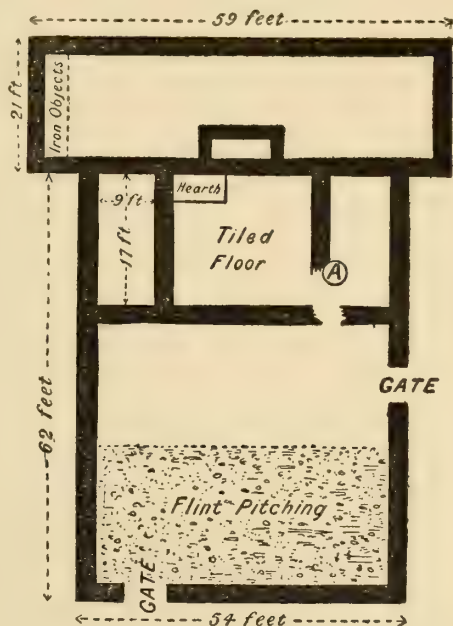


FIG. 17. FINKLEY.

coloured plaster, and roofed with stone slates and tiles. In the westernmost corner of these a remarkable hoard of iron objects was found. fifty-two arrow-heads, three fibulæ, many nails, some knives and small tools. The other smaller finds included Samian, New Forest, and other pottery, fragments of glass, a bronze fibula, etc., and a few coins, ranging from a very worn 'second brass' of Trajan to Valens. The building was plainly occupied during the earlier part of the fourth century. Nearly the whole structure was cut across from north to south by an irregular trench, which Dr. Stevens does not venture to explain. Romano-British

<sup>1</sup> The primitive Irish house, as imagined by Meitzen (i. 184, iii. 281), has a faint similitude. But far too little is yet known to justify speculation on this point.

<sup>2</sup> *Journal of the British Archaeological Association*, xxiii. 268-308; Jos. Stevens, *History of St. Mary Bourne*, 60; *Intellectual Observer*, xi. (1867) 470, xii. 310.

## A HISTORY OF HAMPSHIRE

interments have been noticed at several spots near this building. Dr. Stevens mentions a cremation burial inside it (A in plan), and a little distance westwards some inhumation burials have been dug up on Eastanton Down. Such may or may not be connected with the dwelling-house just described, or with others near it.<sup>1</sup>

(11) Lower Wick (or Wyke), about a quarter of a mile south of the Roman road, and near Flesch Stile. Here roof-tiles and bricks lying on the surface indicate a building; and much pottery, animals' bones (*bos longifrons*, etc.), and what is perhaps a well, have been dug out, but the site has never been excavated.<sup>2</sup>

(12) Lower Link, about a quarter of a mile south of the Roman road, near the Bourne rivulet, and perhaps a mile east of the preceding. Here foundations of coarse flint masonry have been noted; also Romano-British pottery, an iron knife, and a denarius of Gordian (A.D. 238–244), and near, three skeletons and urns. This site also has never been excavated.<sup>3</sup> Some coarse pottery from here is in the Andover Museum and in the Hartley Institution at Southampton.

(13) New Barn Down, near Dirty Corner, three-quarters of a mile east of Hurstbourne railway station. Fragments of stone, roof-tiles, and pottery had been noticed here since or before 1867, and accidental digging in or about 1871 and 1893 has revealed distinct traces of a dwelling-house, masonry, stucco, Samian, and other pottery. The masonry included a mortised slab for a doorpost, and the capital of a column, resembling those found at Redenham (No. 1).<sup>4</sup>

(14) There are other sites near Andover where Roman remains suggestive of villas have been found or said to have been found, but where the vagueness of the record or the want of exploration prevents us from actually placing villas. Such sites may be noted for future enquirers, (a) Warren Farm, four miles west of Weyhill; (b) Bere Hill, immediately south-east of Andover; (c) Enham, where tiles, pottery and rude tessellated flooring, now in Andover Museum, are said vaguely to have been found by Mr. Kell in 1869; (d) Upper Wick (or Wyke) Barn, from which a bit of rude tessellated flooring is in Andover Museum; (e) Binley, Warwick and Cowleaze—on the Ordnance Survey Maps No. xvi. N.E. and S.W.: here the apparent abundance of surface indications suggests that

<sup>1</sup> R. C. Hoare, *Ancient Wilts*, ii. 49; *Journal of the British Archaeological Association*, ii. 97, xxviii. 328–336; Jos. Stevens, *History of St. Mary Bourne*, 61–70, and *Newbury Field Club papers*, 1870–71, p. 134.

<sup>2</sup> Jos. Stevens, *Journal of the British Archaeological Association*, xxxv. 93, and *History of St. Mary Bourne*, 59. I do not know if this is the same as Durley's Ground, near Middle Wick, where one or two Roman bricks and potsherds have been noted: *Journal of the British Archaeological Association*, xxiii. 280. Flesch Stile, as I was assured on the spot, is the point where the road from St. Mary Bourne village to Middle Wick Farm comes into the line of Roman road, the 'Portway.'

<sup>3</sup> Jos. Stevens, *History of St. Mary Bourne*, 59.

<sup>4</sup> *Ibid.*, 25–36; *Journal of the British Archaeological Association*, xxiii. 280; information given by Mr. Engleheart and Mr. W. H. Jacob. A piece of white tessellated pavement from this site is in the Andover Museum.



## ROMANO-BRITISH HAMPSHIRE

one or another of them may conceal a Romano-British house.<sup>1</sup> Lastly (*f*) Andover Museum contains some pottery and part of a tile from Hurstbourne Priors churchyard. But one tile does not prove a house.

II. We pass to the villas which we have mentioned as lying north-east of Winchester, in the direction of Basingstoke and Alton. Several of these lie near the Roman road from Winchester to Silchester; a few are further eastwards.

(15) On the west side of Basingstoke, in the suburb of Newtown, on the north bank of the river Loddon. Here roof-tiles, with nails, paving- and ridge-tiles, and flue-bricks, were found in 1880, with Samian and other pottery, fragments of glass, and part of an iron tool. With this we may connect some sepulchral urns found in 1839 at the Reading bridge road, and presented to the British Museum.<sup>2</sup>

(16) At Crondall (north-west of Farnham), 200 yards north of Badley Pound Farm. Here foundations, with loose fragments of bricks and pottery, have been traced over two fields, and in May, 1817, three rooms were excavated, one paved with tiles 6 inches square, one with brick *tesserae* an inch and a half square, and the third with an ornamental mosaic 12 feet square. The mosaic showed a floral and geometrical pattern in black, red, and white, divided into nine octagonal compartments. The central compartment contained a two-handled vase (a not uncommon device); the others, four-petalled flowers and tulip-like ornaments. The design was copied at the time, but the mosaic itself perished fifty years ago. Coins, including one of Constantine and one described as of Antoninus Pius, were found at the same time. Enthusiasts have also discovered a 'Roman well,' a 'Roman amphitheatre,' and a 'Roman entrenchment,' but the student may neglect these. An earth-work in an adjoining copse and a well certainly exist. A remarkable hoard of Saxon and Merovingian coins, buried about A.D. 650, was found near Crondall thirty years ago, but has no connection with the 'villa.'<sup>3</sup>

(17) Near Binsted. Scattered references mention a Roman villa in this parish. 'Vestiges of extensive buildings, pavements, and walls' at Wick were reported in 1844 to the British Archæological Association (*Archæological Journal*, i. 393). A stone sarcophagus, with a skeleton and six or more urns, was found, at some date before 1850, near Wheatleys, between Binsted and Alice Holt (*ibid.* ix. 12, with a plate), and its finder, Mr. W. L. Long, states in his *Observations on Roman Roads in the South of Britain* (Farnham, 1836), that remains of Roman buildings

<sup>1</sup> *Journal of the British Archæological Association*, xxiii. 280. Some other neighbouring sites, which are often described as Roman, such as Egbury, have yielded only coins or rude burials, and no trace of houses.

<sup>2</sup> *Ibid.*, xxxvi. (1880) 119; *Archæological Journal*, ix. (1852) 9.

<sup>3</sup> *Archæological Journal*, xvi. 298; letter from Mr. Thos. Eggar. *An Account of the Mosaic Pavement* was issued in 1817 by Mr. Jos. Jefferson, of Basingstoke (18mo, pp. 15). For the later hoard see *Numismatic Chronicle*, 1870, 164. The statement made by some writers that a 'villa' has been found at Powderham, in the parish of Bentley, seems really to refer to the Crondall 'villa,' which is close to Powderham.

## A HISTORY OF HAMPSHIRE

had been noted at Wick, on the rich platform of the malm (or lower chalk) escarpment which overlooks Kingsley and Woolmer (see *Archæologia*, xxviii. [1839] 453). In the adjoining (southern) portion of Alice Holt, kilns and extensive traces of Romano-British potteries have often been noted. See *Archæologia*, xxviii. 452; *Proceedings of the London Society of Antiquaries*, xv. (1894) 178.

(18) Near Blackmoor House, in Woolmer Forest. Here tiles and pottery were found about 1867, and the tiles may indicate some sort of building; but no search seems to have been made for one. The other remains found in this locality are described below, p. 339.

(19) At Alton. Here a mosaic pavement is said to have been found in the eighteenth century, and Roman remains, not further described, have been noted near the Butts at the south end of the town and towards Holybourne and near Neatham at the north-east end. Some graves with pottery, a lamp and an onyx ring, were found at Alton in the first half of the nineteenth century.<sup>1</sup>

(20) North of Old Alresford towards Lanham Down, near Bighton Woodshot. Here a villa was thought to have been discovered in 1844 (*Archæological Journal*, i. 386). Curtis, in his *History of Alton*, mentions 'hollow Roman bricks' from the parish.

(21) Near North Waltham, at the Wheat Sheaf Inn, on the line of the Roman road from Silchester to Winchester. Here extensive foundations were found in the earlier half of the nineteenth century and destroyed; among the minor objects found were a 'small bull's head in brass,' a fibula, part of a bronze bracelet, a Roman Republican coin (*gens Scribonia*), a silver coin of Valentinian, and others.<sup>2</sup>

(22) Half a mile south of Popham, in College Wood, a little to the east of the Roman road from Silchester to Winchester, and about two miles south of the preceding. Here bricks and Samian and other pottery are strewn on the surface, and a wall of bricks was once dug out by a farmer. Two small coins of Constantine have been noted here.<sup>3</sup>

(23) At Chapel Field in the parish of Preston Candover, about a mile west of the village, roof-slates, tiles, oyster-shells, and other vestiges of a small house have been noted. Local tradition places here a buried church, the bells of which are audible from underground to passers-by at night.<sup>4</sup>

(24) At Stanchester Field, in the parish of Chilton Candover, about a mile north-west of the village and west of the preceding site. Here were foundations, and pottery and tiles have been noticed lying freely on the surface. The name is significant, as one of the few 'chesters' in Hampshire, but its occurrence does not imply that the place was a

<sup>1</sup> Wilks, iii. 308, mentions the pavement; Curtis, *History of Alton*, p. 5. Buckland & Selborne's ed. of White's *Natural Hist. of Selborne* (London, 1880), p. 464.

<sup>2</sup> *Archæological Journal*, vi. 193, 404.

<sup>3</sup> *Ibid.*, vi. 194: information from Dr. S. Andrews. He also tells me that skeletons and Romano-British pottery were found half a mile west of Popham church in 1895.

<sup>4</sup> Information from the Rev. Sumner Wilson; *Hants Notes and Queries*, vii. 118.



## ROMANO-BRITISH HAMPSHIRE

Roman fort or military post. The word denotes nothing more definite than an enclosed space or house of some sort.<sup>1</sup>

(25) In Mitcheldever Wood, on the east side of the Roman road, Mitcheldever itself lying to the west. Here foundations of flint and mortar walls, bricks, flue-tiles, and Samian and other pottery were discovered in 1844. Mixed up with the foundations was a hoard of at least 1,400 'third brass,' including Gratian, Theodosius, and Arcadius, and therefore presumably belonging to the end of the fourth century.<sup>2</sup>

(26) At Itchen Abbas, on the high ground rising northwards from the Itchen valley. Roman pottery from this site was exhibited to the Archæological Institute at Winchester in 1845, and part of a 'villa' was excavated in 1878-79. Five rooms were opened and three good mosaics discovered. The largest room ( $16\frac{1}{2}$  by 18 feet) had in the centre of its pavement a mosaic 9 feet square, the design of which shows the head of Flora or of Summer, set in a circle and framed in a square border made by three rows of geometrical ornament. A second, oblong room (9 by  $16\frac{1}{2}$  feet) had in the centre of its pavement an oblong mosaic ( $5\frac{1}{2}$  by 12 feet), showing a conventional eight-pointed flower in a circle set in a square and on either side decoration based on the motive of a two-handled cup. The third and smallest room (9 feet square) had in its floor a panel of purely geometrical ornament. Each of these mosaics was surrounded by a border of plain tessellation which ran round the edges of the floors. This arrangement was common, and must have produced somewhat the same effect as that of a rug laid on drugget or a carpet which leaves the floor visible all round it. The other two rooms examined were paved, one with white concrete and the other with plain red tesserae. The oblong room was warmed with a hypocaust. The smaller finds include elaborately painted wall-plaster, roof-slates, bricks, Samian and other pottery, and one or two coins of Constantine. Having found so much, and having assured themselves that the 'villa' was well worthy of proper excavation, the excavators dropped the work.<sup>3</sup>

III. By a natural transition we proceed from Itchen Abbas to the 'villas' south-east and south-west of Winchester. These are fewer and more scattered than those of our two preceding sections; they do not indicate the same grouping of many dwelling-houses in one neighbourhood such as we have found to exist round Andover and near the Candovers.

(27) At Bramdean, on the Brookwood estate, not quite a mile east of the village and 500 yards north-east of Woodcote Manor House. Part of a fine 'villa' was excavated here in 1823; foundations were traced over three-quarters of an acre, and were suspected to extend much further. The part actually excavated was a row of seven rooms

<sup>1</sup> Information from the Rev. Sumner Wilson. The foundations (I am told) were rooted up to supply flints for a neighbouring church.

<sup>2</sup> *Archæological Journal*, iii. 160; *Proceedings of the Numismatic Society*, April 25th, 1844.

<sup>3</sup> *Journal of the British Archæological Association*, xxxiv. 234, 504, xxxv. 109, 209, with plates of the mosaics. Some popular accounts of this villa confuse it with Bramdean, No. 27. The site pointed out to me by neighbours as the site of the 'villa' is near an old yew tree on the hill top, 500 yards from Lone Farm, and a mile north of Itchen Abbas village.

## A HISTORY OF HAMPSHIRE

with a corridor, and belonged apparently to a house of the normal courtyard type. Most of the rooms were paved with plain red brick tessellation, but two contained fine mosaics in fairly perfect preservation. The southernmost of these two was 19 feet square, and was fitted with a hypocaust; the edges of its flooring were, as often (p. 307), plain red tesserae, and in the centre was the mosaic, 12 feet square. The design shows a central octagonal panel representing the combat of Hercules and Antæus; round are four compartments containing heads framed in interlacing squares, and the interstices are filled with dolphins and varied geometrical ornament (fig. 16). The other room (16 by 20 feet in extent) contained a still more interesting mosaic, though less perfect. Its design shows a central circle with eight practically triangular panels arranged round it, the whole enclosed in a square frame or border (fig. 15). The central circle contains a head which has usually been identified with Medusa; the eight other panels bear the heads of Sol, Luna, Mars, Mercury, Jupiter (with a trident?), Venus, and two defaced deities. These, as Mr. Roach Smith correctly observes, are the gods who presided over the days of the ancient week. Most ancient European peoples divided the lunar month into four quarters of seven days each, though the Romans preferred four quarters of eight days. The idea of connecting these seven days with certain planetary deities came from the East, and was well known to the Romans at least as early as the first century of our era. Representations of these deities occur in many parts of the Empire, especially in Roman Germany, where we meet altars carved with their figures. Sometimes an eighth figure is added, either because the purely Roman week had eight days or because eight figures can be arranged more symmetrically than seven. The seven gods are Saturn (who holds first place), Sol, Luna, Mars, Mercury, Jupiter, and Venus; the eighth is usually Fortune or Bonus Eventus or the like. On the Bramdean pavement the heads of Saturn and the eighth deity have been defaced, but it differs from other representations of the Eight Gods only in that Sol, not Saturn, seems to hold the first place, and that Jupiter, if our accounts are correct, has a trident and not a sceptre. The prominence given to Sol might possibly denote a Christian artist, accustomed to Sunday, but arguments based on such possibilities are best avoided. These pavements were long kept open under a shed, but are now entirely ruined, and the shed is become a sheepfold. The smaller finds made in this 'villa' seem to be of the usual type; the coins found are said to date from the end of the third and the fourth centuries.<sup>1</sup>

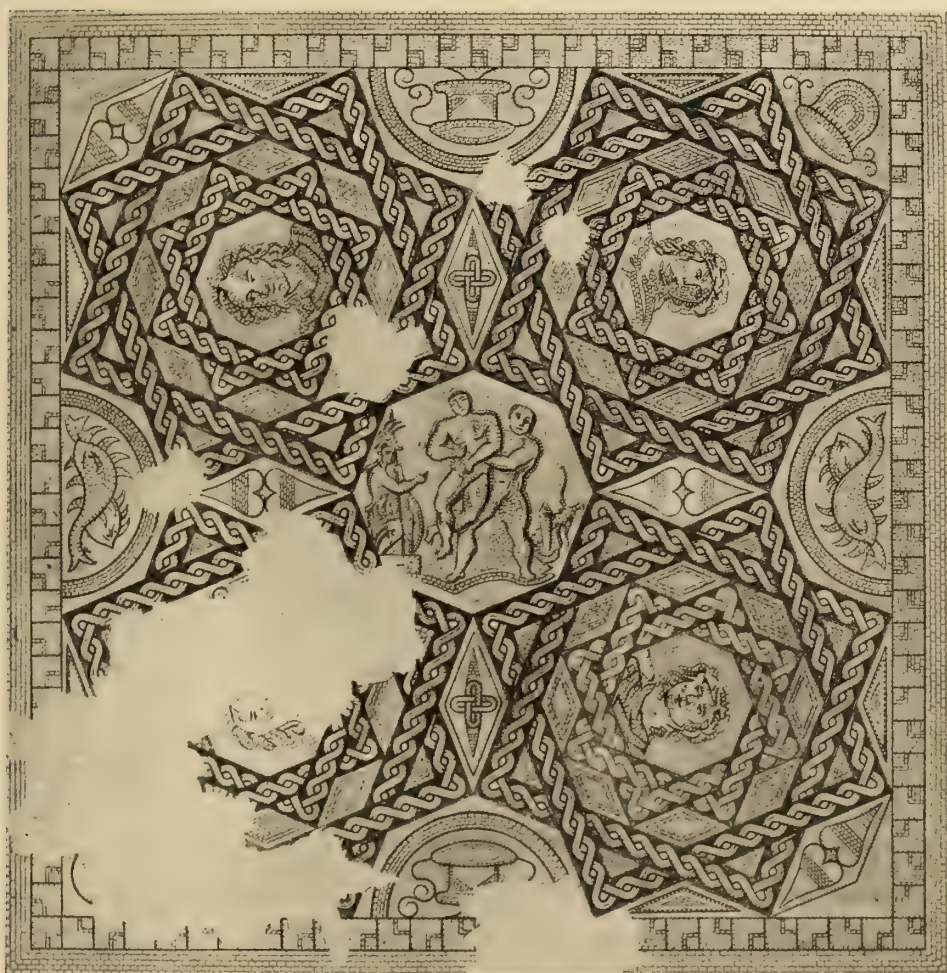
(28) At Froxfield, two miles north-west of Petersfield. Here a shallow 'bath,'  $3\frac{1}{2}$  feet square, paved with Roman tiles, was excavated and destroyed in 1855. Fragments of Roman pottery were found, and tiles and rubble-work, apparently foundations, have been noticed

<sup>1</sup> R. Colt Hoare in *Archæologia*, xxii. 52; *Gentleman's Magazine*, 1823, i. 631, 1824, ii. 100; J. Duthy's *Sketches of Hampshire*, 32-43; C. Roach Smith, *Collectanea Antiqua*, ii. 54-63—these two latter with illustrations. For the representations of the Seven (or Eight) Gods see Lersch, *Bonner Jahrbücher*, iv. 147 and v. 299, and Haug, *Westdeutsche Zeitschrift*, ix. 17.





18.



19.

FIGS. 18, 19. MOSAIC FLOORS : BRAMDEAN (p. 308).

*To face p. 308*





## ROMANO-BRITISH HAMPSHIRE

close by. A small earthwork with a triple fosse on its north-west side is on the same site.<sup>1</sup>

(29) Near West Meon, in Little Lippen Wood, about half a mile west of the village, and just over the hill-top. Here Mr. A. Arnold, of the Court Farm, has noticed and pointed out to me traces of a Roman building—tiles, freestone and flint debris, bits of cement flooring (*opus signinum*), etc. As the remains are in a copse, it is difficult to estimate their extent.

(30) Near Corhampton, about two miles from the village on the hills west of it, near St. Clair's Farm, at Littleton Five-acres. Here very extensive foundations of flint and mortar masonry were found and partly destroyed in 1849; some of them seemed to be walls of a large enclosure, as of a yard. Pieces of freestone from the Binstead or similar quarries in the Isle of Wight, a bit of Samian, much common pottery, and some Roman tiles were noticed.<sup>2</sup>

(31) Near Upham, in a copse called Wickes or Weekes Row, three-quarters of a mile from Blackdown (or Beechgrove) House. Part of the copse was grubbed up in 1849, and traces of a 'villa' found—a large oblong structure, 36 by 124 feet in extent, with its walls standing 5 feet and plastered with stucco coloured green, red and yellow; roof-slates, tiles and bricks; much pottery, articles of iron and bronze, and other small objects. Foundations were also noted leading from the excavated part into the copse, and also in another wood, called Well Copse—there is said to be an old well there—which is adjoining to Wickes Row, but nearer to Blackdown House. A Roman road has been supposed to run from Winchester past Morestead, Owslebury, and Upham to Porchester; its traces, however, fade out a little north of Upham, and, if it ever was a Roman road, it may have led from Winchester to the 'villa' at Upham. A similar road led from Cirencester to the villa at Chedworth.<sup>3</sup>

(32) Near Bishop's Waltham, south-west of the town, on Lock's Farm. Part of a flint pavement, tiles and pottery are reported from here: some of the pottery is now in the Hartley Institute at Southampton. The exact site, still marked by debris of bricks and pottery, is about 100 yards south of the farm house, and west of a little stream. About 100 yards away an urn with a hoard of Roman coins was found about 1830.<sup>4</sup>

(33) At Twyford, near the south end of the village, 350 yards east of the high road and 200 yards south of the lane from Twyford towards Owslebury. Here considerable remains of a 'villa' were found

<sup>1</sup> *Proceedings of the London Soc. of Antiq.*, first series, iii. 191; *Archæological Journal*, xii. 199; *Hampshire Field Club*, I. i. 24. This Froxfield should not be confounded with the Froxfield in Wiltshire, between Hungerford and Marlborough, where also a 'villa' has been found.

<sup>2</sup> *Archæological Journal*, vi. 396; information from Mr. Campbell-Wyndham.

<sup>3</sup> *Ibid.*, vi. 397; *Journal of the British Archæological Association*, v. 376. The remains at present visible in Wickes Row are modern.

<sup>4</sup> *Hants Notes and Queries*, vi. 66; H. W. Trinder, *Hampshire Chronicle*, 2 June, 1900.

## A HISTORY OF HAMPSHIRE

in 1891—bathrooms for cold and hot water, hypocausts and drains ; part of a moulded base of a stone column, coloured stucco, tiles and bricks ; coins, pottery, and smaller objects. These are plainly remains of the baths in some fair-sized house, of which the living-rooms still await exploration. A plan of the discoveries was made, but has since been lost. Pottery and querns have also been found at Twyford Moors, three quarters of a mile south of this, and there is an old vague record of a ‘villa’ thereabouts.<sup>1</sup>

(34) South of Botley, near Fairthorn House. Here Roman tiles, rough tessellated pavement, etc., were found in 1889, and brick-works have been supposed to exist, but a villa seems much more probable.<sup>2</sup>

Fragments of tiles and pottery, now in the Hartley Institution, were found in 1888, at Badnam Creek on the Hamble river a little below Bursledon. I do not know if these represent another ‘villa.’

(35) Near Rowlands Castle. Here on the edge of Hampshire and Sussex traces of Roman dwellings have been found, as it seems, in both counties. A building, with a red and white tessellated pavement, was cut across in Stansted Park during the construction of a road through Watergate Hanger in 1895. Nearer Rowlands Castle itself, in Mayze Coppice, a building with several rooms, red tessellated flooring, painted wall stucco, etc., was found more than fifty years ago. About 1852 a crock of Roman copper coins was dug up near the same spot. Roman pottery has been reported from Idsworth Park, or its neighbourhood, and a little south of the Park, in Blendworth parish, a Roman ‘camp’ has been recorded by the ordnance surveyors. Excavation would probably show here a ‘villa’ astride of the eastern county boundary, much as the West Dean villa is astride of the western county boundary (No. 38).<sup>3</sup>

(36) On the north part of Hayling Island, a little west of North Hayling Church, in the Towncil Field. Part of extensive buildings here have been excavated recently (1898–99) by Mr. Talfourd Ely, and the work is still in progress. At the time of writing the nature of the structures unearthed is not yet plain, but they seem to be partly sheds or barns, partly living-rooms, the latter being indicated by the presence of painted wall-plaster, roof-tiles, potsherds, limestone *tesserae* from some ruined pavement, pottery, and the shells of oysters, snails and periwinkles. The coins discovered include a ‘second brass’ of Augustus, a denarius of Pius, a ‘second brass’ of Faustina the Elder, and a coin of Domitian (dated A.D. 95) which is very little worn and must have been dropped soon after its minting. Later coins (Postumus, etc.) have also been found, but the earlier coins seem proportionately commoner here than in most ‘villas.’<sup>4</sup>

<sup>1</sup> T. F. Kirby, *Proceedings of the London Soc. of Antiq.*, xiv. (1891) 11–12 ; *Hants Notes and Queries*, vi. 68 ; information from Mr. Kirby and Mr. W. H. Jacob.

<sup>2</sup> *Archæological Review*, iv. 68 ; *Hampshire Notes and Queries*, vi. 47 ; information from Mr. R. A. Burrell, of Fairthorn, Mr. H. W. Trinder, and Mr. W. Dale.

<sup>3</sup> C. J. Longcroft, *Hundred of Bosmere*, p. 123 ; *Archæological Journal*, xxi. 186, xxiii. 235.

<sup>4</sup> *Archæological Journal*, lv. 290 ; information from Mr. Talfourd Ely.



## ROMANO-BRITISH HAMPSHIRE

(37) At Nursling, on the east bank of the Test, near the railway. No actual foundations have been discovered, but the Romano-British objects from the site are sufficiently numerous and important to make it highly probable that a dwelling or village stood here. In breaking gravel for ballasting the railway in 1880, many rubbish pits were found, containing Samian and other pottery, part of a statuette in white clay, ashes, bones, and coins. Three wells, two of them steined with stone, and what may be a sunk furnace—others call it a granary—have also been observed, and the smaller objects found at one time or another include much good Samian ware; Upchurch, New Forest, and other pottery; a dozen fibulæ and various bronze and iron fragments; a bronze ring set with lapis lazuli; a bronze figure of a stag, supporting a candlestick; three Gaulish silver coins and some seventy Roman coins, of which fifteen date from A.D. 70–230, and the rest from A.D. 250–380. Of rather special interest is an ornamental weight, consisting of a little metal bust of a Bacchante found in 1842, acquired by Mr. Roach Smith, and now in the British Museum; it is of lead cased with bronze, with eyes of silver and lips and nipples of copper, and weighs 83 ounces. These remains testify to more wealth and civilization than we might expect in a village.<sup>1</sup>

(38) At West Dean, on the north side of the railway, close to it and to the Wiltshire boundary. A piece of mosaic with a rather elaborate geometrical pattern was dug up here in 1741, and exhibited in London. Excavations made in 1846 on behalf of the British Archæological Association showed foundations of rooms with plain tessellated floors, a fragment of good mosaic, and some bits of painted stucco, but no smaller objects. Foundations and fragments of tiles and pottery have been noticed also in adjoining fields, and the 'villa' was doubtless extensive. Part of it reached into Wiltshire, and showed that negligence of the English county boundary which we have already mentioned as characteristic of Roman Britain (p. 266). This part was examined in 1871–73 by the Rev. G. S. Master, and two buildings were found about 90 feet distant from the earlier discoveries. One of these measured 75 by 216 feet, was equipped with baths and a corridor, and was apparently a dwelling-house of a familiar type. The other, 110 by 35 feet, somewhat resembled the Castlefield building (No. 9). It had at one end a room 11 feet wide, extending for its full width of 35 feet, and next to it a small room 11 feet square; the rest of the area was empty except for two or three fireplaces and a row of posts extending the length of the building. The smaller objects found in these buildings were the usual painted wallplaster, pottery, glass, tiles, roofing slates, some bits of

<sup>1</sup> *Journal of the British Archæological Association*, xxii. 358, xxxvii. 296–300, xli. 182–188; C. Roach Smith, *Collectanea Antiqua*, iv. 57, with illustration of the ornamental weight; *Proceedings of the London Soc. of Antiq.*, first series, i. 71; *Gentleman's Magazine*, 1839 (i.), 194. Some of the objects found at Nursling are in the museums at Salisbury and Devizes. I have not thought the Roman roads said to pass through Nursling sufficiently authenticated or probable for mention here.

## A HISTORY OF HAMPSHIRE

marble, coins from Victorinus to Magnentius (A.D. 265–353), and a seal figured with a Christian crucifix, which appears to me not to be Roman, but eighteenth or nineteenth century work.<sup>1</sup>

(39) At Holbury, one and a half miles east from the preceding, and, like it, on the north of the railway and river. Here part of a 'villa' or its farm buildings was dug out by the Rev. G. S. Master in 1869–70. He found a rectangular edifice, internally 49 by 59 feet, with flint walls and very simple arrangements. In the north-east and north-west corners were two rooms, each 9 by 12 feet, and in the space between them an open hearth; at the south end of the building were four massive piers of flint 8 feet from the walls and from one another, apparently intended to carry a roof. Here we plainly have one of the more primitive forms of 'villa' buildings, resembling those dug up at Castlefield and Finkley (9, 10), and, as we should expect, very few traces of civilized

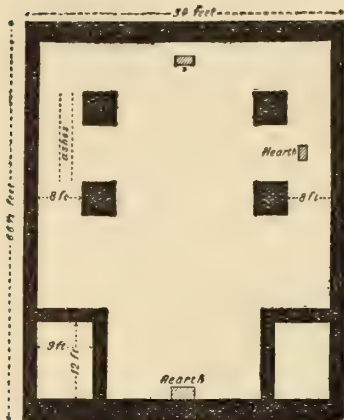


FIG. 20. HOLBURY.

occupation were found in it—two fireplaces, many ashpits, a fourth century coin, a little pottery, some iron nails, and one or two tiles. But the neighbourhood of this edifice, though it yielded no foundations, yielded indications of a dwelling-house—much window glass, Portland roof slates, animals' bones, oyster and snail shells, much pottery of all sorts, iron and bronze objects, and nearly two hundred coins, mostly of the fourth century. A quarter of a mile off, in Holbury Copse, Mr. Master came upon a great heap of pottery of all sorts, including Samian—as he calculated, representing nearly 1,000 vessels—about 30 coins of A.D. 250–350, and one bit of bronze.<sup>2</sup>

(40) At Broughton, about a mile west of the church and three-quarters of a mile north of the Roman road from Salisbury to Winchester. Here a Roman 'villa' is said to have been found, and Sir R. C. Hoare noted pottery south of this spot and near the Roman road. A lead 'pig' was found in the neighbourhood, but it belongs to the traffic along the Roman road and not to any locality near its provenance. Some glass-works have also been detected near, in Buckholt parish, but they are of mediæval, not of Roman date (see p. 323).

(41) In West Wood and Cowdown Copse, on the north side of the Roman road from Salisbury to Winchester, and a little north-east from Farley Mount, in the parish of Sparsholt, four miles west of Winchester. Excavations made here on behalf of the Hampshire Field

<sup>1</sup> Winchester volume of the British Archæological Association, 239–245, with plates of the mosaics; R. Colt Hoare, *Modern Wilts*: 'West Dean,' p. 30; *Wilts Arch. Magazine*, xxii. 249. Some of the objects found in 1871 are at West Dean.

<sup>2</sup> *Wiltshire Archæological Journal*, xiii. 33, 276. Some of the objects are in the Hartley Institution, some at West Dean.



## ROMANO-BRITISH HAMPSHIRE

Club in 1895 revealed flint and mortar walls, stone and brick roof-tiles, drain-pipes, pottery, bones, and a coin of Victorinus (A.D. 265-267). Probably the house was not a large one. Roman coins have also been noted in an earthwork at Ashley, two miles away, and a denarius of Philip was picked up in Crabwood in 1894.<sup>1</sup>

I add here a site at Longstock, four miles north of the Roman road and Broughton. A large tile from here is in the Hartley Institution and indicates remains which deserve examination.

IV. The Isle of Wight was as much influenced by Roman civilization as the bulk of the mainland of Hampshire. One of its 'villas,' that found near Brading, remains open for visitors to see, and

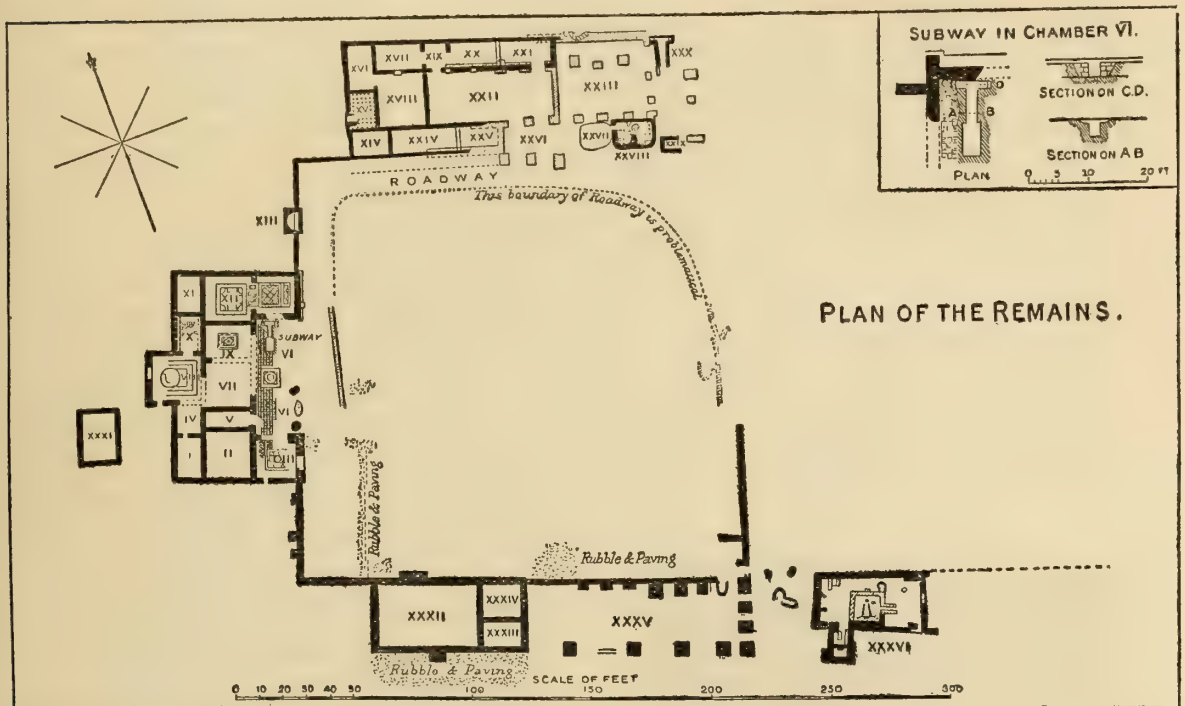


FIG. 21. THE ROMAN VILLA AT BRADING.

is one of the best known of our Romano-British 'villas,' though perhaps it does not altogether deserve its reputation.

(42) Half a mile south-west of Brading, and 300 yards west of the hamlet of Morton. Broken tile and *tesserae* were noticed on the surface here by visitors at various dates, and finally by Capt. Thorp in 1879. Regular excavations were commenced soon after, and by degrees a large part of an extensive 'villa' was laid bare. Its general scheme is somewhat similar to that of Redenham and Clanville—three isolated buildings on the north, west, and south sides of a large courtyard, which measures about 185 feet each way. There were also, apparently, outbuildings not as yet explored. The residence lay on the west side, an oblong block of 55 by 90 feet, containing twelve rooms. The front is

<sup>1</sup> *Hampshire Field Club*, ii. 201; information from Mr. W. H. Jacob.

## A HISTORY OF HAMPSHIRE

formed by a hall or corridor 50 feet long (No. vi. in plan), with a room at each end, projecting slightly so as to form two wings; three central apartments open into this corridor, and the rest are grouped round these and presumably had windows in their outer walls. The whole is a not uncommon variety of the corridor type.

But the mosaics which adorn its floors are extensive, curious and elaborate. The front hall (vi.), paved mostly in a plain style, has in the middle a decorated panel ( $7\frac{1}{2}$  by  $8\frac{1}{2}$  feet), with a subject which occurs on many mosaics: Orpheus with his lute charming the wild beasts—in this case two birds, a monkey, and a fox or squirrel. The room (iii.) which opens out of the south end of the corridor contains a damaged mosaic (originally 7 by  $8\frac{1}{2}$  feet) with intricate and unusual details (fig. 22),—in the centre a head and on each of the three remaining sides a curious scene: (1) a cock-headed man facing two winged leopards, and a building with steps up to it; (2) a pair of gladiators, one with a knife (?) and trident, the other defaced; (3) a fox under a tree creeping up to a building (? a farmyard). The cock-headed man in the first scene appears to be Abrasax or Abraxas, a strange mystical figure connected with obscure forms of religion or magic which prevailed widely in the later Roman Empire and were closely related to Gnosticism. But too little is known of these curious beliefs to permit us to interpret this scene in detail. An Abraxas gem has been already quoted among the Silchester inscriptions. The room at the other end of the corridor (xii.), which forms with an adjoining room one large apartment (19 by 40 feet) like a double drawing-room, is elaborately ornamented with figured mosaics (fig. 23). The front part, next the corridor, has a square panel (12 feet) with a Medusa's head in the centre



FIG. 24. FROM ROOM XII.

and round it four heads of horn-blowers in triangles, the four winds, and four pairs of figures in squares. These are (1) a fountain nymph with her urn, and a shepherd (fig. 24); (2) Ceres offering the fruits of the earth to Triptolemus; (3) a Satyr chasing a Mænad; and (4), perhaps, Lycurgus persecuting a Mænad. The division between the two rooms is marked by a small panel showing a philosopher with sundial, column, globe and cup, the instruments used generally to indicate a philosopher or man of science. The adjoining room has a square mosaic (14 feet) which originally contained a central circular piece, four oblong scenes, and four heads in the four corners.

It is much defaced, but the heads appear to be those of the Four Seasons, and the only surviving oblong exhibits an incident from





FIG. 22. MOSAIC FLOOR IN THE BRADING VILLA, ROOM III. (p. 314).

*To face p. 314.*





## ROMANO-BRITISH HAMPSHIRE

classical mythology, Perseus and Andromeda sitting together after her rescue and looking at the reflection of the Gorgon's head in a pool of water.

This brief account will show that the Brading mosaics are elaborate and ambitious ; let us add that their execution does not wholly lack spirit. But as artistic achievements they are not successful. They must unquestionably be ranked beneath the best specimens of mosaics found in England or abroad, and if we confine our comparison to Hampshire 'villas,' we must call them inferior to the pavements of Thruxton and Bramdean. The other objects noted in the same block of building are ordinary roof-slates, glass, Samian, New Forest, and other pottery, and the average domestic details. Some fragments of stucco painted with birds and foliage, from the large apartment north of the corridor, show a rather unusual elegance, but no other traces point to very great wealth or luxury. The heating arrangements of the block seem not to have been satisfactorily explored.

The northern block, to the left of that just described, is an oblong of 55 by 140 feet, of which at least half was inhabited. Most of its rooms have concrete floors, one (xv.) has a hypocaust ; and roof-tiles, window-glass, and painted wall-plaster were found freely in it. Two large rooms or halls at its eastern end (xxii., xxiii. : 21 by 54 and 32 by 40 feet) are traversed by two parallel rows of rude column-bases, and remind us of the arrangements of Clanville and Castlefield (Nos. 4 and 9). The southern block is much simpler—an oblong, 30 by 160 feet, divided into four parts, one of which (xxxv.) occupies half the whole area. The walls are roughly built ; pavements and wall-plaster are absent. Here probably stood storerooms and sheds. On the other hand, a structure (xxxvi.) which stood a little east of it, but apparently distinct from it, revealed a hypocaust, a cistern or bath, coloured wall-plaster, roofing, and among small objects the shells of edible molluscs. An oval-shaped stone was also found, and thought to bear an inscription IMXI ; but, so far as I can judge, the letters are merely accidental scratches.

The coins detected in the excavations cover the whole period from Domitian to Honorius, but very few are older than about A.D. 250. We may conclude, at least provisionally, that the occupation of the site belongs to the third and fourth centuries.

Not quite the whole of the 'villa,' probably, has been explored : the baths, for instance, are not yet found. But we have ample details and can form a general judgment. The 'villa' at Brading was neither of the best period nor of special size and splendour, but neither was it a farmhouse. It must have been the residence of men of the upper classes, owners (we may suppose) of broad acres all around. They may not have possessed great wealth or many articles of luxury ; they may have carried such things away with them when they abandoned the house. Some time in the dim period of which we know so little, early in the fifth century, the place was burnt by enemy or accident,

## A HISTORY OF HAMPSHIRE

and the Romano-British life which it had sheltered came utterly to an end.<sup>1</sup>

(43) A mile and a half east of the preceding 'villa,' across the river Yar, in Centurion's Copse. Here tiles and pottery have been found, but no proper exploration has taken place, and it is impossible to guess the character of the remains; they may have formed an out-building on the Brading estate. The name 'Centurion's Copse' is doubtless the production of some archæologist who noticed the tiles.

(44) At Comby Farm, on the north slopes of Arreton Down. The foundations of two buildings, stone slates, and pottery (including Samian) have been noticed here, especially in 'Morgan's Close' and 'Saltmore Copse.'<sup>2</sup>

(45) At Carisbrooke, in the vicarage grounds, in the valley between the town and the Castle. Here a 'villa' was detected and partly excavated in 1859 by Mr. Spickernell and others. The piece

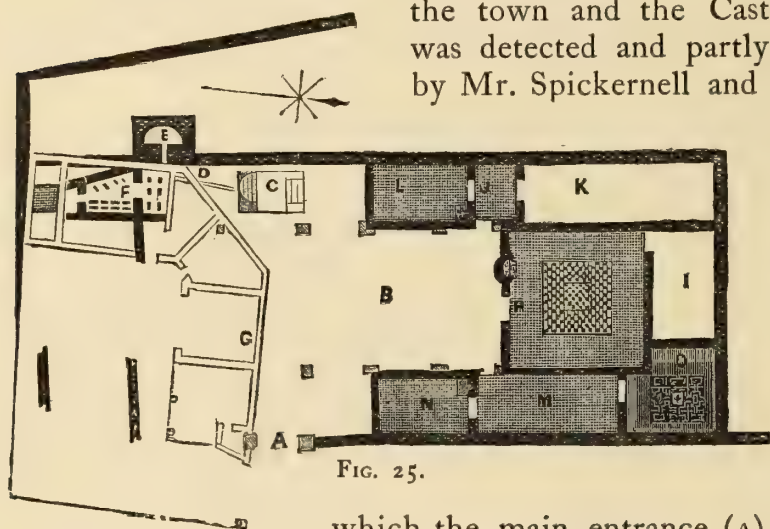


FIG. 25.

examined is an oblong, 50 by 118 feet, much resembling the principal of the three buildings at Clanville (No. 4). In the centre is a columned area (B) floored with rough concrete, into

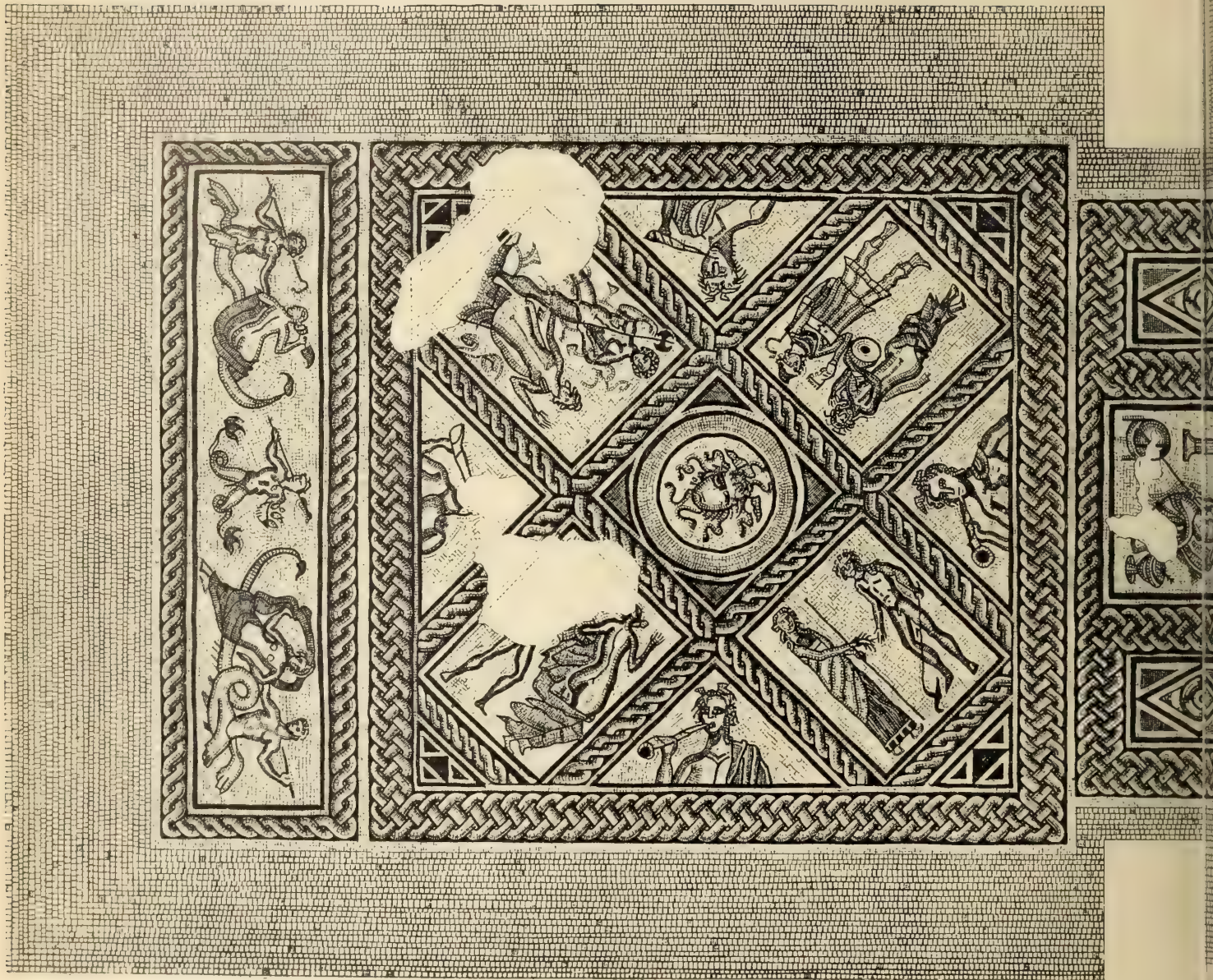
which the main entrance (A) led. At each end of it are rooms. To the north there are eight rooms, the largest (H) measuring 22 feet square. Two of these are constructed, as at Clanville, between the columns and walls of the central area; but the records of the excavation do not state whether these rooms were part of the original plan or were added subsequently. Six are paved with tessellation and two have mosaics: the large room (H) has a plain chessboard pattern, and a smaller room (D) in the north-east corner of the edifice has a rather intricate geometrical design in red, white, blue, and black, which is not without merit (fig. 26). At the other end of the building were a furnace (C, D), a semicircular bath-room heated by it (E), and another heatable room with a tessell-

<sup>1</sup> John E. Price and F. G. Hilton Price, *Remains of Roman Buildings at Morton near Brading* (London, 1887, quarto), with plates, since reissued in smaller format, with added notes of later excavations, under the title *A Guide to the Roman Villa at Morton* (Ventnor, Briddon Bros.); C. Roach Smith, *Collectanea Antiqua*, vii. 237-40; *Journal of the British Archæological Association*, xxxvi. (1880) 363-66. The objects found on the excavations are principally preserved on the spot in a small museum. I am indebted to Prof. Percy Gardner and Mr. A. H. Smith for aid in elucidating some details of the mosaics.

<sup>2</sup> Lockhart, *History of the Isle of Wight* (appendix to Wilks, iii.), p. 21; C. Roach Smith, *Gentleman's Magazine*, 1867, i. 791.



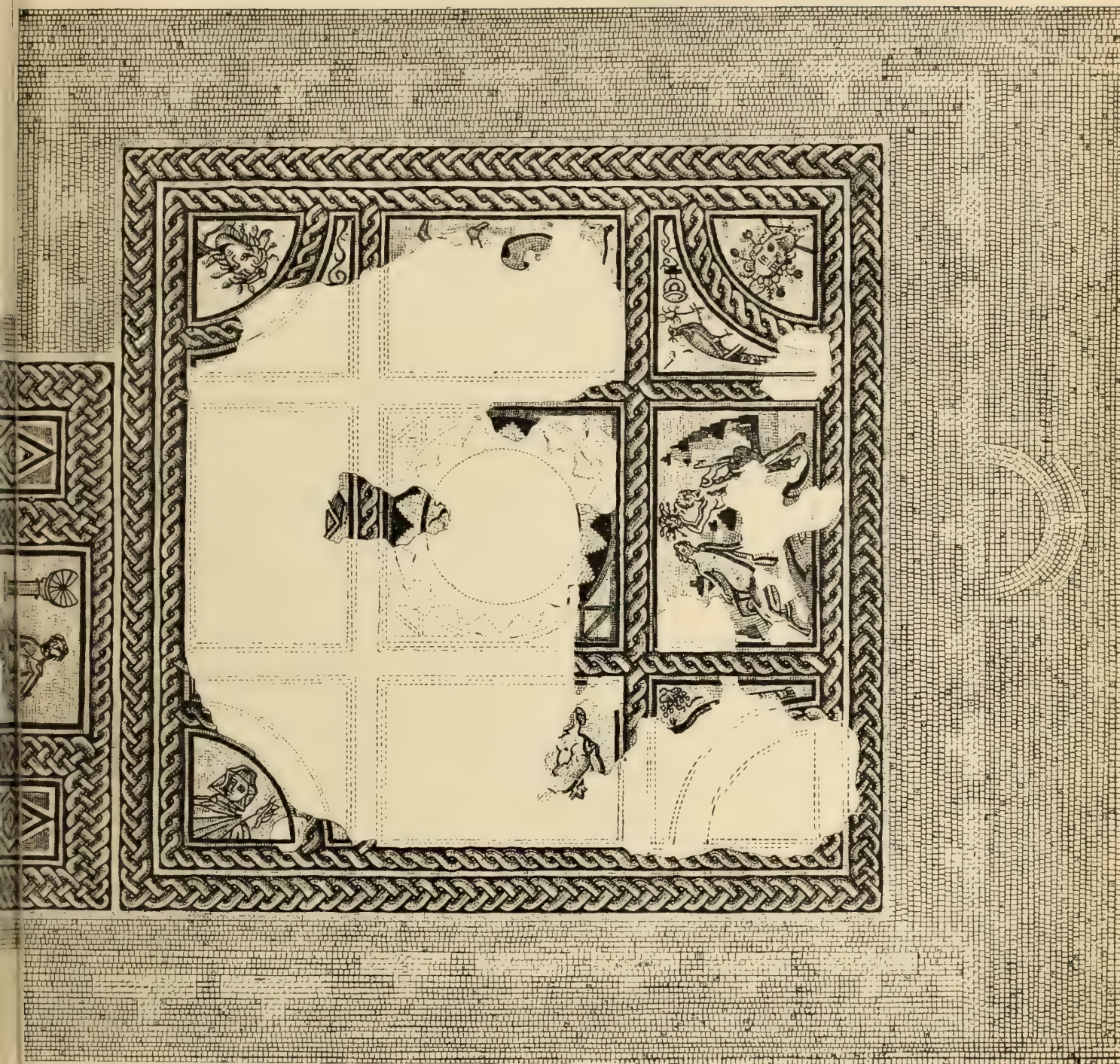




0 1 2 3 4 5

FIG. 23. MOSAIC FLOOR IN THE





15

20 feet





## ROMANO-BRITISH HAMPSHIRE

lated floor (F), for the use of the bather; the other rooms at this end were not explored. Enclosure walls were noted to run out from this building, and foundations have been traced in the vicinity, doubtless of out-buildings. The smaller finds include wall-plaster, coloured with foliage and flowers, roof-slates, pottery of all sorts, bones of animals and shell-fish, but no objects of value or luxury. The coins range from about A.D. 250–350, as at Clanville. A curiosity is an early Gaulish coin, a trace of pre-Roman days, which must have been lying on the surface in Roman times and so come into the ruins of the 'villa.' Another curiosity is an 'aureus' of Libius Severus (A.D. 461–465) found long before the excavations, about 1843, and perhaps not at the precise locality of the 'villa.' These will not deter us from ascribing the occupation of the 'villa,' at least provisionally, to the century indicated by the majority of the coins.<sup>1</sup>

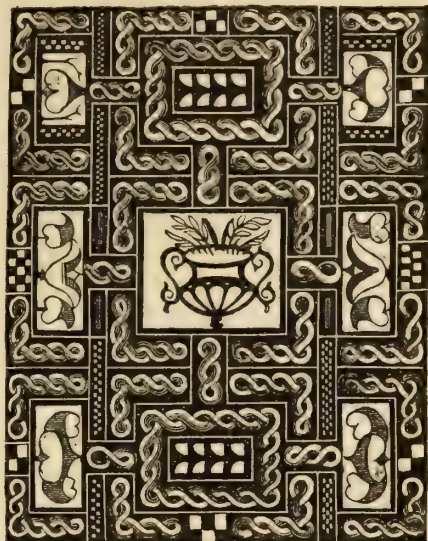


FIG. 26. FLOOR OF ROOM D.

(46) At Clatterford, about half a mile further up the little valley in which stands the Carisbrooke villa, and opposite Bowcombe Barn. Here flint-walling has been detected, and Roman tiles and pottery are scattered over the surfaces of two fields called King's Quay and Court Mead. Coins have been picked up near.<sup>2</sup>

(47) At Newport. No foundations or traces of an actual 'villa' have been found here. But coins of very various dates (Claudius I.—Valens) have been picked up from time to time, and in 1861 a cemetery with urns containing burnt bones and ashes was cut through on the north side of the town during the construction of the Newport and Cowes railway. The idea propounded by the Rev. E. Kell, and repeated since by many writers, that the streets of Newport represent the lanes of a Roman town, is wrong. But some sort of village probably existed near.<sup>3</sup>

(48) At Gurnet or Gurnard Bay. Foundations of a 'villa' were exposed here on the face of the cliff in 1864 by the action of the sea,

<sup>1</sup> C. R. Smith, *Collectanea Antiqua*, vi. 121–129, with plan and plate of mosaic; W. Spickernell, *Gentleman's Magazine*, 1859, ii. 399, and *Guide to the Villa*; *Archæological Journal*, xvii. 63 (brief note); E. P. Wilkins, *Geology and Antiquities of the Isle of Wight* (London, 1859), 53–57; Lockhart, p. 20; H. Boucher James (vicar of Carisbrooke), *Letters*, i. 5, 14. For the coin of Libius Severus, see *Numismatic Society's Proceedings*, Jan. 25th, 1844; Lockhart assigns it to Newport. Some of the objects found are in the Newport Museum. The foundations and pavement have been left open for visitors to see.

<sup>2</sup> Lockhart, pp. 19, 21; Wilkins, p. 57; *Journal of the British Archæological Association*, ii. 102, viii. 323, xii. 160; tiles, etc., in Newport Museum.

<sup>3</sup> Wilkins, p. 58, and *Archæological Journ.*, xix. 168; *Journ. of the Brit. Archæological Assoc.*, viii. 322; xvii. 332, Warner, *Hist. of the Isle of Wight*, p. 12; Lockhart, p. 17; Gough's *Camden*, i. 211. The objects found here are mostly in the local museum.

## A HISTORY OF HAMPSHIRE

and three rooms with plain tessellated floors were excavated. Root-slates, Samian and New Forest pottery, a little bronze statuette of Mercury, and a few coins and other minor objects were discovered. Eighteen leaden buttons or round tickets are said to have been found at the same time, but the late Sir Augustus Franks and all other good judges who have seen them pronounce these to be post-Roman.

The existence of this villa has supported an elaborate theory of a Roman trade-route from the Hampshire coast to the Isle of Wight, and across it to Puckaster Cove. As will be pointed out below (p. 325), this theory has neither proof nor probability behind it. Here we may observe that to allege a 'villa' in proof of a trade-route is to mistake wholly the nature of a 'villa.'<sup>1</sup>

(49) Near Brixton Shute and Rock, between Brixton and Calbourne. Here Mr. E. P. Wilkins has noted foundations of twelve or fourteen rooms, tiles, pottery, coins, and a skeleton in a walled grave. Near Brixton itself much pottery, including some Samian, has been noted, and kilns have been suspected, but the varieties of the pottery found are too various to indicate manufacture on the spot.<sup>2</sup>

Let us look back for a moment on this list of 'villas' and rural habitations in Roman Hampshire. It is an unsatisfactory list. Some of the remains included in it may not be those of buildings at all; some, which seem to be dwellings, are of uncertain type or purpose; some are cottages; few even of the larger houses are sufficiently known to us to be accurately estimated. From such materials we cannot paint a precise and detailed picture. Much must at the end remain obscure—the relations of various buildings to one another, the number of buildings on any one estate, the extent of each estate. Even in Roman Gaul, about which we know far more than we know of Britain, the details of the villa-system are difficult to decipher. But, despite all this inevitable uncertainty, we do learn from our Hampshire remains that a definite agricultural life of the villa-type existed in the districts outside the two country towns of Venta and Calleva. We see the villas of the landlords, the farm buildings of their estates, occasionally the dwellings of their peasantry. They may not seem so abundant or so eloquent of wealth as those of several other among our counties. It is just an average piece of southern non-military Britain that we have before us.

### 6. THE ROADS

From our description of country towns and country, we pass to the roads. The importance of the Roman roads in Britain has been, I think, somewhat exaggerated by English topographers. The whole

<sup>1</sup> Kell, *Journal of the British Archæological Association*, xxii. 351–368, with a plan and some strange hypotheses; *Intellectual Observer*, vii. (1865) 230, xi. (1867) 154; Lockhart, p. 23. Some of the objects found are in the Newport Museum and in the Hartley Institution at Southampton.

<sup>2</sup> Wilkins, pp. 57, 58; Lockhart, pp. 18, 22; *Journal of the British Archæological Association*, xii. 141, 159.



## ROMANO-BRITISH HAMPSHIRE

study of Roman Britain has now and again been treated as though it were simply a study of roads and of place-names connected therewith. The character of the places on (or off) the roads has been held comparatively immaterial. This is to invert the true relation of the two subjects. In our present sketch of Roman Hampshire, we have preferred to describe the places first. We now come to the roads.

As we have observed above, our evidence for determining the roads is of two kinds, written and archæological. The former is supplied principally by the Roman road-book known as the *Itinerarium Antonini*, which gives the distances and 'stations' along various routes in the Roman Empire. Its exact age is disputed, and does not here concern us; its accuracy, which matters more, is by no means complete. There must have been errors in the original, and errors have plainly crept in during its transmission to us. Distances were probably a little over-rated or under-rated occasionally by the Romans. Names have been misplaced and figures miscopied by the mediæval scribes. In general it is more useful as testifying that a road ran in a particular direction than as telling us correctly the precise distance of place from place. For our present purpose four of its routes are material. We give the distances, as given by the writer of the Itinerary, in Roman miles, premising that 12 English equal 13 Roman miles.

(1) Route from Regnum (Chichester) through Winchester to London: Regnum to Clausentum, 20 miles; Clausentum to Venta Belgarum, 10 miles; Venta to Calleva Atrebatum, 22 miles; Calleva to Pontes, 22 miles; Pontes to Londinium, 22 miles.

(2) Part of route from Isca (Caerleon-on-Usk) by Cirencester (Durocornovium) to Calleva: D. to Spinæ, 15 miles; Spinæ to Calleva, 15 miles.

(3) Part of an alternative route from Isca by Aquæ Solis (Bath) and Cunetio (Marlborough) to Calleva: Cunetio to Spinæ, 15 miles; Spinæ to Calleva, 15 miles.

(4) Part of route from Calleva by Venta Belgarum and Sorbiodunum (Old Sarum) to Isca Dumnoniorum (Exeter): Calleva to Vindomis, 15 miles; Venta Belgarum, 21 miles; Venta to Brige, 11 miles; Brige to Sorbiodunum, 8 miles.

To this we should add the evidence of names, like Stratton and Strathfieldsaye, and of indications which may be gained from mediæval charters. The archæological evidence, on the other hand, is yielded by actual remains, as when we dig up ancient metalling or find a still existing track which runs with persistent straightness from one Roman site of importance to another.

Combining the evidences thus indicated, let us attempt to describe the Roman roads of Hampshire. They belong to the system of roads which served the land south of the Thames, and they may be easiest traced from the central points of Silchester, where the road from London first divides, and Winchester, where the southern branch of it divides again. I have traversed considerable portions of these roads myself.

## A HISTORY OF HAMPSHIRE

(1) The road from London commenced north of the Thames, crossed it probably at Staines (Pontes), and ran due west, passing a little north of Sandhurst and Wellington College. On crossing the Blackwater it enters Hampshire, and passes by Stanford, Cold Harbour Wood and Strathfieldsaye Park to the East gate of Silchester. For part of the way it is the county boundary ; for part it coincides with an existing road, and is known as the Devil's Highway. In the immediate neighbourhood of Silchester it crosses fields, but its course can be traced.<sup>1</sup> From Silchester four roads diverge, of which the first is very doubtful.

(2) Northwards to the Thames. Interments appear to have been found for a little distance outside the North gate, and supposed traces of the road were noted near Ufton church in 1837,<sup>2</sup> but the course assigned for a Roman road on the Ordnance Map is really conjectural. Possibly, however, the former road from Theale past Englefield to Pangbourne on the Thames may be part of a route from Silchester to the river. The question can only be settled by judicious excavation.

(3) Westwards to Spinæ (Speen) and the west. The Itinerary twice mentions a route from Calleva to Spinæ, and the distance which it gives agrees fairly with the real distance from Silchester to Speen. No trace of the road has been actually found, unless the 'Imp-Stone' on Silchester Common be a Roman milestone once inscribed IMP. CAES (Imperator Cæsar) ; it is the required shape, but no lettering is visible. But the Itinerary is adequate evidence, and till excavation is attempted we must be content with it. The Roman remains found at Newbury suggest that the road did not cross the Kennet till close to that town.<sup>3</sup>

(4) South-west from Silchester past Finkley and other sites to Old Sarum, 36 miles. This road is not mentioned in the Itinerary, and in the immediate vicinity of Silchester it has not been noticed, nor even looked for ; further west, near Lichfield, St. Mary Bourne, Andover, Grately, and Old Sarum, it is well attested. At its nearest traceable point to Silchester, its direction aims straight at that place. Near Lichfield it used to be called Devil's Bank, and passes Streetley Copse. Further west it is styled Portway, and much of it is still used. Near St. Mary Bourne portions of it were broken up in 1878, and were found to be formed of flint pitching 24 feet wide. The original road was probably narrower, for, with the course of time and ploughing, the material of any made road is apt to spread a little on each side.<sup>4</sup>

<sup>1</sup> It was surveyed, without excavation, by the Sandhurst R.M.C. in 1836. See the *United Service Journal*, January, 1836 ; *Archæologia*, xxvii. 415 ; *Gentleman's Magazine*, 1836, i. 535.

<sup>2</sup> *United Service Journal*, Sept., 1837, p. 17.

<sup>3</sup> This road was surveyed by Sandhurst students at the same time as No. 1. See the *United Service Journal*, Sept., 1837 (p. 18), and *Gentleman's Magazine*, 1838, ii. 194.

<sup>4</sup> The course of the road is described by last-century writers printed in Stukeley's *Correspondence* (Surtees Society), ii. 174 and *Archæologia*, i. 64. See also *Archæologia*, viii. 100 ; R. Colt Hoare, *Ancient Wiltshire (Roman Aera)*, p. 49 ; Britton & Brayley, p. 236 ; Stevens in *Journal of the British Archæological Association*, xxxv. (1879) 93, and *History of St. Mary Bourne*, p. 57. It appears as a 'Street' in several Saxon charters relating to estates near Lichfield and Andover (Birch, *Cartularium*, Nos. 597, 602, 624).



## ROMANO-BRITISH HAMPSHIRE

(5) Southwards from Silchester to Winchester and the coast. Like the preceding, this is not traceable, nor has it been sought, near Silchester; but from near Sherborne St. John to the suburbs of Winchester it is almost continuously still in use, and at its nearest traceable point to Silchester its direction aims straight at that place. It passes near Waltham, Popham, and Stratton; from Kings Worthy to the North gate of Winchester it passes through fields close to Hyde Abbey. From the South gate of Winchester it follows the modern road, or, as we should rather say, the modern road follows it till near Otterburne; thence it runs through fields, and its course to the site at Bitterne Manor is not well ascertained. From Bitterne it has been thought to go by Bursledon, Fareham, and Havant to Chichester, but no traces have been recorded. Chichester, however, seems to be *Regnum*, and a Roman road coming from towards Havant enters its West gate.<sup>1</sup>

The account of this road in the *Itinerary* is puzzling, and has caused much conjecture. In one of its routes the *Itinerary* gives the sequence 'Calleva Vindomi xv., Venta Belgarum xxi.,' and in another, 'Calleva Venta Belgarum xxii., Clausentum x., Regnum xx.' The first trouble arises over *Vindomis* (or whatever the nominative form should be), which occurs in the first and in the second of these routes. Camden put *Vindomis* at Silchester, and *Calleva* at Wallingford; Horsley imagined two routes to be meant—one direct from *Calleva* (Silchester) to Winchester, and one round by Farnham; others have other theories. But these conjectures only plunge us deeper. There are no roads or remains at Reading or Farnham or any other suggested site. Two possibilities seem open. Either the first route gives a detour by the neighbourhood of Andover and parts of roads Nos. 3 and 6, by which the distance from Winchester to Silchester is 32 English miles—that is, very nearly the 36 Roman miles of the *Itinerary*; in this case *Vindomis* must be a little posting station somewhere near St. Mary Bourne or Lichfield parishes; or the *Itinerary* has here, as elsewhere,<sup>2</sup> incorporated a branch route, and the first route should be read: *Calleva* to *Vindomis*, 15 miles; *Calleva* to *Venta*, 21 miles. In this case *Vindomis* would lie off the direct line to *Venta*, either in the neighbourhood of Popham (p. 306), or perhaps on the Portway, just where our alternative hypothesis would place it. Sir R. C. Hoare actually advocated this last idea, but the special spot which he selected, Finkley, is unsuitable. It is not 15, but 20 Roman miles from Silchester, and the apparent similarity of the names Finkley and *Vindomis* in their first syllables is deceptive, for, as the example of *Venta* and Winchester shows, *Vindomis* would become Win—and not Fin—in English. On the whole, it will be best

<sup>1</sup> Early charters mention a 'Street' near Popham, Worthy, Stoneham, and Havant: see Birch, *Cartularium*, Nos. 520, 596, 625, 692, 707, 1,076. The idea that there was a 'station' *Ad Lapidem* at Stoneham was invented by Bertram (Richard of Cirencester), and rests on no evidence whatever. Aubrey (MS. ii. fo. 97) says he saw the gravel of the 'causeway' near Stratton; see also R. C. Hoare, *Ancient Wiltshire (Roman Aera)*, 64–66.

<sup>2</sup> J. A. R. Munro, *Modern and Ancient Roads of Eastern Asia Minor* (Supplementary Papers of the Royal Geographical Society, iii.), p. 82.

## A HISTORY OF HAMPSHIRE

to consider the site of Vindomis as undetermined. It was probably an insignificant place, and we need not deeply regret our inability to identify it.

A second difficulty in the route which we are now considering arises from the distance assigned in the Itinerary for the stage from Clausentum to Regnum. The latter, for many reasons, can hardly be anything but Chichester, and Clausentum seems naturally to be Bitterne. But Bitterne is nearly thirty miles from Chichester. Various explanations have been attempted. Camden, for instance, put Regnum at Ringwood. But the similarity of the names, which allured him, is of course deceptive, and there is no trace known either of a road to Ringwood or of any kind of Roman remains there. It is more probable that the numeral in the Itinerary is wrong, and that we should read xxx for xx. The fact that our end-points are fairly well determined, justifies such an assumption.

We pass on to the Roman roads radiating from Winchester. The two which lead north to Silchester and south to Bitterne we have already considered: two others remain.

(6) Winchester to Marlborough and Cirencester. This road is not mentioned in the Itinerary, but its straight course can still be followed. It left Winchester, apparently, by the North gate, and for seven miles it is still a high road across wide, lonely downs. After crossing the Test it traverses Harewood Forest, passes just a mile east of Andover, cuts the Portway (p. 320 above), and runs straight on into Wiltshire at Conholt Park; finally it crosses Savernake Forest, and reaches the little 'station' of Cunetio at Mildenhall, near Marlborough. Its course near Andover has been described by eighteenth-century antiquaries, and it is still mostly road or lane. At Harewood Forest local farmers tell me that its bank can still be seen in the wood and its stony track detected while ploughing in adjoining fields.<sup>1</sup>

(7) Winchester to Old Sarum. This route is mentioned in the Itinerary, which reads: Venta Belgarum to Brige, 11 miles; Brige to Sorbiodunum, 8 miles. The total of nineteen Roman miles is rather less than the real distance of twenty-one English miles, but the error need not disturb us. The road itself can still be traced. Leaving Winchester by the West gate, and climbing the hill, it runs between Crab Wood and Pitt Down, where it is still in use. Near Farley Wood and King's Sombourn its traces are less visible, but it appears to have crossed the Test at Horsebridge, and from near Broughton to Old Sarum it is still in use.<sup>2</sup> The situation of the half-way 'station,' Brige,<sup>3</sup> is uncertain.

<sup>1</sup> *Archæologia*, i. 64; Stukeley's *Correspondence*, ii. 174, 178; R. Colt Hoare, *Ancient Wiltshire (Roman Aera)*, pp. 67-72. Aubrey, in his papers preserved in the Bodleian (ii. 119) gives a road direct from Winchester to Newbury. This is probably an erroneous version of the road described above.

<sup>2</sup> R. C. Hoare, *Ancient Wiltshire (Roman Aera)*, pp. 58-65.

<sup>3</sup> Brige is the form given in the Itinerary. Most of the names in that document are in the accusative or ablative, and Brige might be the ablative of some such name as Brix (genitive Brigos), which Professor Rhys tells me is quite possible, and even favoured by Irish parallels. But in the absence of definite knowledge, it is simplest to use the form Brige. The word seems to mean 'hill,' and to be kindred with the Welsh *bre* of Pembrey, Moelvre, etc., and many Celtic words containing the syllable brig. Bede (*Hist. Eccl.*, iii. 8) mentions a monastery in Gaul 'in Brige,' now Faremoutier-en-Brie, which is probably the same name.



## ROMANO-BRITISH HAMPSHIRE

Camden placed it at Broughton, but he seems to have had no better reason than the similarity of the initial letters. Stukeley selected a site a trifle further west, 'on the brink of a woody hill called Horseshoe Wood, overlooking Broughton.' There, he says, 'Roman antiquities are often found.' Sir R. C. Hoare noted Roman pottery in the fields three-quarters of a mile east of Buckholt farm, between the Roman road and a spot called Cold Harbour. For the present it may be safest to leave the site of Brige undecided (see p. 321).<sup>1</sup>

The roadway has been cut across near Farley Mount and is stated to be composed of Lower Bagshot pebbles from the vicinity (*Hampshire Antiquary and Naturalist*, ii. 89).

One interesting vestige survives of Roman traffic along this road. In 1783 a pig of lead was found near Bossington, a little west of the place where the road crosses the Test. The precise point of finding is not recorded. A contemporary writer in the *Gentleman's Magazine* describes it as 'on the verge of Broughton brook on the Houghton side of the water,' and as 'at or near Bossington.' The pig was first acquired by Mr. Thomas South of Bossington. It is now in the British Museum. It is a bar or block of lead 2 feet long, and 156 pounds in weight. Shape, size, and weight are alike those usual for Roman pigs of lead. It bears three inscriptions, one on the top or face, and one on each of the longer sides:—

on the face

on one side

on the other

(last letter faint)

NERON<sup>†</sup>SA/GEXKIA/III<sup>†</sup>COSBR<sup>†</sup>

‡xKIVL · P·M·CoS

EXARGENT·

CNPASCIS

*Neronis Aug(usti), ex k(alendis) Ian(uariis)<sup>2</sup> quartum co(n)s(ulis) Brit(annicum): [e]x k(alendis) Iul(iis) p(ontificis) m(aximi) co(n)s(ulis). Ex argent. Cn(aei) Pasci s(igillum?).*

'British (lead), the property of the Emperor Nero, consul for the fourth time on January 1; pontifex maximus and consul from July 1. Desilverized. The stamp of Cnæus Pascus(?).'

The face and one side tell us that the lead was mined in Britain and was State property, as minerals mostly were under the Roman Empire. They also give dates indicated by Nero's titles. Nero was consul for the fourth time in A.D. 60, from January till July. In July he resigned the office, and the fact is recorded here on the side of the 'pig,' by his being called 'pontifex maximus' and consul without a number. Why it was thought needful to be so minute we cannot tell, but the result of the minuteness is that we can date the pig to the latter

<sup>1</sup> Stukeley, *Itin. Curiosum*, p. 184. A glass factory was excavated by Mr. Kell in 1860, at Buckholt, the parish next to Broughton westwards, but it is mediæval, though often called Roman. Pieces of the glass are preserved at Southampton, in the Hartley Institution. See the *Journal of the British Archæological Association*, xvii. 55-58, 70.

<sup>2</sup> By a curious error the letters EX KIAN were, in 1873, interpreted *ex Kiangis*, Kiangi being taken to be another form of Ceangi, a tribe of Flintshire where lead was mined. This is totally wrong, but has often been repeated, and recurs even in so recent and admirable a work as Sir John Evans' *Ancient British Coins* (London, 1890), p. 492.

## A HISTORY OF HAMPSHIRE

half of A.D. 60. The other side states that the lead had, as often, been separated from the silver, which was naturally present in the ore. That plainly is the meaning of *ex argent*, though we may doubt as to the exact expansion of the abbreviation, whether *ex argento* or *ex argentariis* (or *argentifodinis*). Cnæus Pascus is the name of the official responsible for 'passing' the block.

Doubtless the lead was mined on Mendip, where the mines near Charterhouse were worked by the Romans at least as early as A.D. 49. When lost, it was being brought along the Roman road from Mendip to Old Sarum, and thence to Winchester, on its way to the Continent. Whence it was to be shipped we cannot tell. A similar pig of Mendip lead, weighing 165 pounds, and bearing Nero's name, was found in 1883 in the harbour of St. Valéry-sur-Somme, on the coast of France.<sup>1</sup>

(8) Two other Roman roads have been alleged to issue from Winchester, one going south-east to Porchester, the other north-east to Alton and Farnham. These roads were first conjectured in the early part of the eighteenth century,<sup>2</sup> and have been frequently, though not universally, accepted; but for neither of them is the evidence really satisfactory. The Porchester road is supposed to start from the East gate, wind up the down immediately east of Hills, and coincide with the existing road, which runs for three miles in a straight line through Morestead towards Owslebury. Near the latter village its traces are admitted to vanish, but it is held to proceed by Bishop's Waltham to Porchester. Thomas Reynolds, writing at the end of the eighteenth century, went so far as to place Clausentum at Waltham, and to trace through it the Itinerary route from Venta to Regnum. But the Roman remains discovered near Waltham are too few to prove a 'station,' of which there is no other evidence, and, except for the straight stretch of road near Morestead, we possess no indication whatever of any Roman way from Winchester towards Waltham or Porchester. If this straight piece be held really to indicate Roman work, it may suggest a road to Venta from the 'villa' at Upham (p. 309). But it is dangerous to base any theory on so slight a foundation.

(9) The road to Alton and Farnham is even less well attested by satisfactory evidence. A Roman origin has been suggested for the piece of high road which runs in a straight line for three miles from Winchester over Magdalen Hill to Avington Lodge, but the district between Winchester and Farnham shows no other trace of anything at all like a Roman road. Aubrey, Stukeley and others professed to have found vestiges between Alresford and Farnham, as, for instance, in the bank of Alresford pond.<sup>3</sup> But these vestiges have never been seen by later

<sup>1</sup> *Gentleman's Magazine*, (1783) ii. 935, (1784) i. 85; *Archæological Journal*, xvi. 26; *Corpus Inscr. Latin.*, vii. 1203; *Ephemeris*, vii. 1120; V. J. Vaillant, *Sur un Saumon de plomb* (Boulogne, 1888), 14; Cagnat, *Année Épigraphique*, 1888, No. 53.

<sup>2</sup> See *Archæologia*, viii. 88 (Richard Willis of Andover), and Taylor's Map.

<sup>3</sup> Stukeley, *Itinerarium Curiosum*, p. 203; Gough's *Camden*, i. 193. Some early charters (Birch, *Cartularium Saxonicum*, Nos. 389, 566, 987, 1068) mention the broad military road (herepath) which ran by Worthy and Alresford, but the term 'herepath' does not necessarily



## ROMANO-BRITISH HAMPSHIRE

inquirers. The road which they are held to prove is open to the further objection that it leads nowhere. No Roman remains have been found at Farnham, and the attempts to place Calleva or Vindomis there are now recognised as mistaken. Nor has any one professed to know of any Roman road leading out of Farnham, except that now under consideration. Plainly, our existing evidence is wholly inadequate to prove that a Roman road ran from Winchester to Farnham.

(10) It remains to notice two roads which have been alleged to cross the New Forest. Neither has the least authority. One may be dismissed without ceremony. It is a road marked on Taylor's map of 1759 as running from Wareham over Pokesdown to Christchurch. No Roman remains have been found at Christchurch or near it; the character of those at Wareham is doubtful, and the road itself is undiscoverable.

(11) The other road demands rather more consideration. It is supposed to run from Bitterne by Nursling through the eastern part of the New Forest to Lepe, near Exbury; thence it crosses the Solent to Gurnard Bay, and runs straight across the Isle of Wight, along the 'Rue (or Rew) Street' to Puckaster Cove. By this route we are often told that tin was brought from Cornwall to be shipped from Puckaster for the Continent. The idea apparently originated with an eighteenth-century antiquary, John Whitaker of Manchester, who had read in Diodorus Siculus that the tin was conveyed to a certain island lying off Britain, named Ictis, to which there was access dryshod at low tide. Ictis he took to be Vectis, the Isle of Wight. His theory has been developed by subsequent writers—Sir R. Worsley, Mr. R. Warner, Mr. Hatcher, the Rev. E. Kell, and others.<sup>1</sup> But it is totally incredible in any form. The Isle of Wight was unquestionably once joined to England. But it was already an island long before Celt or Roman came to our shores, and the idea of a ford or an isthmus exposed at low tide between Lepe and Gurnard Bay is inadmissible. The cove at Puckaster, again, is no proper harbour for tin-ships, which, indeed, could have started more easily from many mainland ports, and philologists are agreed that the name Puckaster cannot have anything to do with Castor or Chester. The road itself is no more satisfactory. A piece of it is said to have been noted at Tachbury, close to Nursling, and another near Dibden and Harley; but this is mere assertion, and the only other trace of it which has been alleged is the name Rue Street. The remains found along its supposed course are very few—occasional coins and the 'villa' at Gurnard Bay, which has been already mentioned. These are far too

mean a Roman road, and is, indeed, often used in early charters as something distinct from one: see Napier and Stevenson, *The Crawford Collection of Early Charters* (Oxford, 1895), pp. 46, 47. Aubrey, in his papers preserved in the Bodleian Library (ii. fo. 96), says he saw 'all along, a perfect Roman way from Aulton to Alresford,' but we need hardly credit this. If he had seen so much the road would not now be unknown.

<sup>1</sup> John Whitaker, *History of Manchester* (1771), i. 387; *Journal of the British Archaeological Association*, xxxvii. (1881) 298, xli. 182.

## A HISTORY OF HAMPSHIRE

slight to prove an important trade route or a route of any sort whatever.<sup>1</sup>

Some references in early charters may be thought to indicate other Roman roads than those above named, but I believe the references are delusive. One charter mentions a 'street' at Chidden, near Hambledon; others give 'streets' in or near the upper Meon valley, but Mr. Stevenson tells me that these charters are spurious, and the word 'street' in them may denote any sort of road. Another charter according to Mr. Birch's interpretation of it, puts the Icenhilde Weg, the Icknield Way, at Hordle, near Lymington. But I understand that the interpretation is wrong, and that the charter really refers to Hardwell, near Uffington, in Berkshire.<sup>2</sup> Other Roman roads have probably been suggested on equally weak evidence: it were tedious to pursue them further.

We have now described the normal features of Roman Hampshire, its town and country life, and its road system. There remain three special features, all by a convenient accident connected with the southern half of the county; these are the potteries of late Celtic or native art in the New Forest, the traces of military occupation at Porchester and perhaps at Bitterne, and the hoard of coins found in Woolmer Forest.

### 7. THE NEW FOREST POTTERIES

The potteries occur in a remote region where Roman remains are rare in the north-west of the Forest between Fordingbridge and Bramshaw, at the spots known as Crockle (Crock-hill?), Isle of Thorns-Anderwood (also spelt Amberwood), Pit's Enclosure, Oakley Enclosure, Eyeworth, and Ashley. Here, in 1852, the Rev. J. P. Bartlett noticed traces of potteries extending over two or three square miles. Several mounds, externally resembling large depressed burrows, were opened, and found to contain in one case five, in another case three, in another case two kilns constructed rudely of bricks. Among the debris were clay and ashes, many fragments of New Forest pottery manufactured in the kilns, and a few other objects; remains of iron tools, beads of Kimmeridge clay, bits of 'Samian' ware, part of a lamp, and some much-worn coins—two 'large brass' of Hadrian and two 'small brass' of Victorinus. At Anderwood a hoard of silver coins was found at some period before 1852; two of the coins were those of Valens and Julian, and the whole hoard was doubtless deposited towards the end of the fourth century. The pottery made in these kilns was of two principal varieties. One is a thin, hard, dark slate-coloured ware, upon which patterns have been laid in white, often rudely representing leaves or grass; the vessels of this ware are usually small jars or vases, 4 to 8 inches high, some-

<sup>1</sup> Prof. W. Ridgeway (*Folklore*, i. 96) tries to save a bit of the theory. He gives up the dryshod access at low tide, and all the Roman side of the case, and pleads for a prehistoric tin trade by the Isle of Wight. I do not think he succeeds, but as he only urges a Pre-Roman trade, his arguments lie outside my present scope.

<sup>2</sup> For Hambledon see Birch's *Cartularium*, No. 976; for the Meon valley, No. 377, 689, 1307, 1319; for Hordle or Hardwell, No. 601.





FIG. 27. FRAGMENTS OF POTTERY, SHOWING VARIETIES OF ORNAMENTATION, FROM THE NEW FOREST POTTERIES (p. 326).

## A HISTORY OF HAMPSHIRE

times moulded by the potter's thumb into an undulating circumference (see p. 339, fig. 32). The other class is a thicker ware with a dull, white, yellowish ground, on which coarse patterns, sometimes foliated, have been painted in red or brown; the vessels of this class are more usually platters or dishes. These wares are rude and inartistic; they have no Roman or Italian analogies, and are obviously native. A similar ware, decorated with leaves, has been found in Gaul. It is a melancholy pleasure to find in this secluded corner of Britain a survival, however poor, of native ways. Specimens of this ware, or of a ware exactly like it, have been discovered on many Roman sites in Hampshire and the adjoining counties, and even as far north as Oxford. They may, of course, have been manufactured at other places besides the district between Fordingbridge and Bramshaw, but kilns have hitherto been found nowhere else accompanied by this ware.<sup>1</sup>

### 8. MILITARY REMAINS : PORCHESTER

We pass on to the second of the special features mentioned above, the remains which indicate the presence of troops. In general, the south of England contains few vestiges of the Roman army. The garrison of the province, as we have already said, was posted almost entirely in the north and north-west, beyond the Severn and the Humber; east and south of these rivers there were few forts, or fortresses, or cantonments. Hampshire was no exception; our survey of it has shown us only scanty and doubtful traces of soldiers—two trifling objects at Silchester, a dedication by an official of very uncertain duties at Winchester. But in the fourth century, when the Saxon pirates were plundering the eastern and southern coasts, the Romans were obliged to provide a frontier defence. A 'Comes litoris Saxonici' was established with a staff and nine regiments garrisoning nine forts.<sup>2</sup> Whether this official's command extended into Hampshire is uncertain. Eight out of his nine forts have been identified; they line the coast from the Wash to Beachy Head. But the position of the ninth, Portus Adurni, is uncertain.<sup>3</sup> Possibly it was at Felixstowe in Suffolk, but possibly also it was in Hampshire. For we have at Porchester, on one of the arms of Portsmouth Harbour, a fort which closely resembles the known forts

<sup>1</sup> *Archæologia*, xxxv. 91-98; *Archæological Journal*, xxx. 319-328, lv. 348; *Proceedings of the Society of Antiquaries of London*, first series, ii. 285, iv. 10, 167. Specimens from the kilns at Crockle are in the Hartley Institution at Southampton, and in the British Museum.

<sup>2</sup> I make no apology for assuming that the Littus Saxonicum was the shore attacked by the Saxons, not (as some hold) the shore on which Saxons had settled. We have no evidence whatever that Saxons settled in Britain during the fourth century. Part of the coast of Gaul, from the Seine to the Loire or Garonne, was also called Littus Saxonicum, and there also we have no trace of Saxon settlements in the fourth century. The phrase itself does not necessarily mean the shore inhabited by Saxons. The 'French Shore' of Newfoundland is certainly not the shore on which the French have settled.

<sup>3</sup> Portus Adurni is usually placed at the mouth of the Adur, in Sussex, but the name is the only evidence, and that is a modern invention. See *Sussex Archæological Collections*, xxxviii. 217-221; *Proceedings of the Society of Antiquaries of London*, xiv. 112, where I have dealt with the question at length.



## ROMANO-BRITISH HAMPSHIRE

of the Saxon Shore ; and we have also at Bitterne, on the Itchen opposite Southampton, remains which are not easy to interpret, but which certainly include fourth-century walls and towers.

Porchester, as we see it to-day, is a square walled area, about 200 yards in length and breadth, and about 9 acres in extent. In the north-west corner stands the mediæval Keep and inner Bailey ; in the south-east corner the mediæval church and its graveyard ; the rest of the interior is an empty expanse of grass. From the twelfth to the beginning of the nineteenth century it has served—with a few intervals—as a fortress or a prison, and the remains of earlier date have been mostly obliterated ; some writers have even denied or overlooked the Roman origin of the fortress. But here, as at Pevensey near Eastbourne,

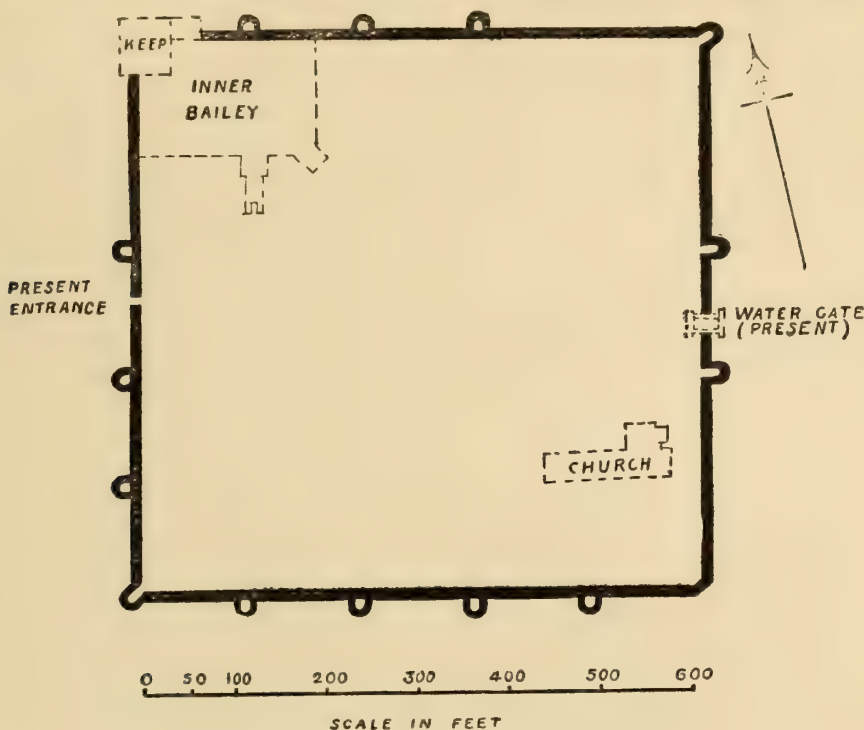


FIG. 28. PORCHESTER.

the mediæval castle-builder has settled himself within a Roman fort. He has adapted the Roman walls as his external line of defence, and has built inside it his Keep and inner Bailey. Roman Porchester was the square walled area, 200 yards each way, which we have already mentioned, and its walls, though much patched and repaired, still show traces of Roman masonry. They were constructed originally of flint concrete 10 feet thick, with bonding-courses, and they were defended by hollow semicircular projecting bastions. The bastions, or many of them, still survive, and the bonding-courses may be noted on all four sides, but best perhaps on the north side, where one bastion shows eight courses, and near the south-west corner. These courses are partly of stone, partly of tile ; it has been sometimes doubted whether the tile is not post-Roman work, but there seems no special reason to take this view.

## A HISTORY OF HAMPSHIRE

The whole style of building agrees with the style of other fourth-century Roman work, and on the evidence of the walls we need not hesitate to refer Porchester to the same period as the ascertained forts of the Saxon Shore. Like those forts, it has yielded very few Roman objects. Fourth-century coins, for instance of Maximin Daza (A.D. 305–314), have occasionally been found, but that is all. The late Mr. C. H. Hartshorne, in his account of the ruins, states that ‘fragments of Roman inscriptions are built into the wall, to the right of the entrance into the inner baily,’ but he does not give the texts of these inscriptions, and I have been unable to discover them or to hear of any one who has seen them.<sup>1</sup> The existing remains are, however, quite adequate to show the character of the place. It is not a city, as one writer calls it—indeed, a city of nine acres would be an absurdity ; it is a fourth-century fort. We cannot now recover its Roman name. Henry of Huntingdon (p. 272) identified it with *Caer Peris*, a name in the puzzling seventh-century list of towns which forms an appendix to the History of ‘Nennius,’ but he had apparently no better reason than the fact that one name begins with *Per* and the other with *Por* ; and, as we know absolutely nothing about *Caer Peris*, the identification, even if proved, would be valueless. Horsley identified it with *Portus Adurni*, a fort on the Saxon Shore to which we have already made allusion ; but this, though possible enough, has yet to be proved. We must rest content with knowing that Porchester was, at any rate, a fort of the same period and kind as the forts of the Saxon Shore.<sup>2</sup>

### 9. BITTERNE

We pass on to a more puzzling site, and one which demands longer consideration—Bitterne Manor, on the east bank of the Itchen, opposite Southampton. Its Roman name is known, but it has given rise to curious theories. Its Roman remains are abundant, but their precise character is not very certain ; perhaps they may in part be military. In any case, we do well to reserve our discussion of the place to the end of our survey of Roman Hampshire.

The Roman name was *Clausentum*, mentioned only in the Antonine Itinerary as ten miles from *Venta* and twenty miles from *Regnum*. The identification of Bitterne and *Clausentum* seems certain, and has rarely been disputed. Bitterne is the requisite distance from *Venta* (Winchester), and traces of a Roman road have been noted between the two places. It is, however, as has been stated above (p. 322), a wrong distance from *Regnum* (Chichester), and, accordingly, two other sites have been suggested for *Clausentum*—Bishop’s Waltham by Reynolds, Romsey by

<sup>1</sup> The assertion that the church stands on the site of a Roman *sacellum* is a gratuitous fiction devoid of probability.

<sup>2</sup> The guide-books and even better works sometimes call Porchester ‘the *Portus Magnus* of the Itineraries.’ No such place exists. The ‘Great Harbour’ of Ptolemy may be Portsmouth Harbour, but it may also be Southampton Water, or any of the neighbouring inland waters. The latitude given by Ptolemy suits Portsmouth Harbour best ; we have no other evidence on the matter.



## ROMANO-BRITISH HAMPSHIRE

Mannert. The former we have already declared to have no claim ; at the latter no Roman remains have been discovered, nor is any Roman road contiguous.

But though the name is certain, uncertainties have attached themselves to it, and in particular two theories. The first concerns the river Trisanton, which Ptolemy names as flowing out into the sea somewhere in this part of England. The early sixteenth-century geographers, having only Ptolemy to guide them, identified Trisanton and Southampton, which they knew as Hamton or Hanton. The progress of philological research has shown that Hanton has nothing to do with Trisanton ; it is not Celtic at all, but the English ‘ham-tūn.’ But this was not recognised in the sixteenth century, and accordingly Hanton and Trisanton were identified. The one bad identification was followed by others. Camden explained Clausentum as Claudh Anton, ‘the port of Anton’—a perfectly impossible etymology, though, even as late as 1845, it received the public sanction of the then Oxford professor of Anglo-Saxon and President of Trinity College. Out of Anton a new name was invented for the Test, which flows into the Itchen hard by ; though it had been known, since Saxon days, as the Tersta(n), or Test, it was now given the name Anton, and the invented name is still in use for a part of the river near Andover.<sup>1</sup> Stukeley went further still. He proposed to alter Clausentum into Trausantum, so as to make it more like Trisanton. We know now that all this is wrong, but the details are worth reciting. They illustrate only too well the wilful readiness to make any conjecture and to accept any etymology, which disfigured the English archæological work of the sixteenth and seventeenth centuries.

Another and very different theory has been connected with the name Clausentum. This theory concerns the route by which the Roman invasion of A.D. 43 was effected. Our sole authority, Dio, tells us very little that is definite about this route.<sup>2</sup> The landing-place or places are not mentioned by him ; but it appears that, after landing, the Romans met fierce resistance, conquered certain Boduni who were subjects of the Catuvellauni, reached the lower Thames where it was tidal, and finally crossed into Essex. This is sadly vague, and the one definite name, that of the Boduni, never recurs elsewhere. Unfortunately, the antiquaries have been busy with it. Since Camden, the Boduni have been generally identified with the Dobuni, whose capital was Corinium (Cirencester), and the Roman troops have consequently been supposed to reach Essex by marching right round the midlands. Prof. Hübner has capped this theory.<sup>3</sup> He has suggested that Clausentum was the chief point of

<sup>1</sup> Compare the case of Adur quoted above, p. 328.

<sup>2</sup> Cassius Dio, lx. 19-21.

<sup>3</sup> Hermes, xvi. 528, and elsewhere. The Bishop of Salisbury has much softened the harshness of the derivation by suggesting that Claudius, who was an antiquary as well as an Emperor, called the place Clausentum in memory of his mythical ancestor, Attus Clausus. The general theory of the route, without the special question of the name, has been independently suggested since by Mr. F. G. Spurrell, *Archæological Journal*, xlvii. 43, but I am unable to accept his arguments. See Furneaux, *Tacitus, Annals*, ii. pp. 135, 136.

## A HISTORY OF HAMPSHIRE

disembarkation, and that thence it gained its name. It was, he thinks, christened after the reigning Emperor Claudius, the appellation 'Claudientum' being formed on the analogy of Italian town names like Laurentum or Nomentum, and then softened into Clausentum. The whole theory is, however, open to grave objections. In the first place, as Mommsen has observed, we have no reason whatever for identifying Boduni and Dobuni; the Boduni were subjects of the Catuvellauni, and ought naturally to be placed in the east or south-east of Britain. In the second place, the suggested route is strategically marvellous. The base, Bitterne, is far from the Gaulish harbours, and a long circular march from it to Cirencester, thence to the south bank of the lower Thames and thence into Essex, in the teeth of fierce resistance, must have been disastrous. And, thirdly, the suggested route is wholly unnecessary. No obstacle stood in the way of the natural course, a landing on the south-east coast and an advance to London, with communications safe and supplies assured. We may, I think, dismiss this theory. For Clausentum itself we do not need any Imperial etymology. It appears to be a Celtic word, connected (as Dr. Whitley Stokes suggests) with Clausetia and Clausonna, and ending in the participial suffix which appears in Novientum and other names.<sup>1</sup>

Let us proceed to describe the place. Its situation is curious and distinctive. Between the two suburbs of Southampton called St. Denys and Northam, the tidal estuary of the Itchen describes a curve which is a complete semicircle; and on its eastern bank, inside the semicircle and close to the river, stood Clausentum, where Bitterne Manor stands to-day. On the north, west, and south it faced the river, and its walls were washed by the tide at high water. The east or land side was protected by two parallel straight lines of defensive works, still faintly traceable, the one 250 yards behind the other. These covered the whole front of the ancient site from the river bank on the north to the river bank on the south. If we may base a calculation on somewhat inadequate data, the outer line of defences, when perfect, may have measured about five hundred yards in length, and the inner line, 350 yards; the outer area, between the two lines, 20 acres, and the inner area, enclosed by the inner line and the river, about 10 acres.<sup>2</sup> The outer line consisted of a wide ditch and an earthwork, which have never been minutely examined. The inner line was a wide ditch and a wall of masonry. The nature of the latter was ascertained in 1804-5, and has been recorded by Sir Henry Englefield. It is described by him as a structure 9 feet thick, composed of flints, and very roughly faced with small square stones, and bonded with large flat tiles, which ran through

<sup>1</sup> *Sentum*—'path,' which forms the last half of Gabrosentum (probably in Cumberland), seems less likely to form part of Clausentum.

<sup>2</sup> These figures are obtained by taking the measurements of the most recent Ordnance Survey (1899), and deducting certain fields which are known to have been reclaimed from the river channel since 1800 (J. S. Davies, *History of Southampton*, p. 12). The rough map included by Sir Henry Englefield, in the second edition of his *Walk through Southampton*, makes the outer line 1,780 feet, and the inner 910 feet long, but these must be exaggerations.



## ROMANO-BRITISH HAMPSHIRE

its interior; behind it was a ramp of earth. At each end it was strengthened by a round tower of solid masonry, 18 feet in diameter, and a third semicircular tower or bastion, 24 feet in diameter, projected from its face at 78 feet from the northern tower. A similar wall, without an earthen ramp, defended the other sides of the inner area, which fronted the river, but its exact course is not now determinable. On his plan Sir Henry Englefield marks only a piece of the north wall west of the Manor House and a piece of the south wall near the south-east corner of

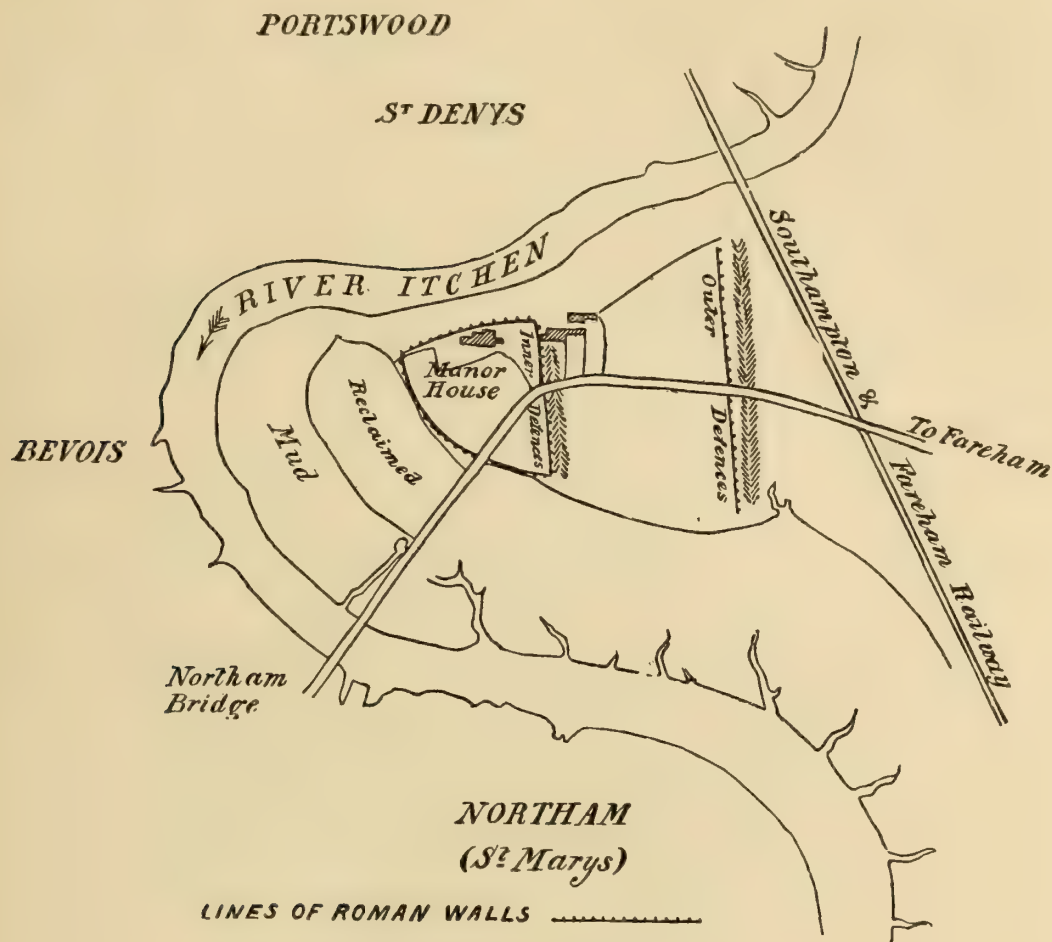


FIG. 29. BITTERNE.

Scale 6 inches to 1 mile.

the inner walled area. In his text he mentions a carved stone as found in the west wall. When I visited the spot in 1898, a small piece of exposed masonry could be seen west of the house, and the course of the wall could be traced some little way. I thought to detect the north-west corner of the inner walled area a little west of the house, and most of the line of the west wall. It is impossible from these facts to estimate the exact shape of the inner area, but it appears to have been somewhat between a semicircle and a triangle, with a wall all round it.

The character of the place itself is equally hard to make out. Many

## A HISTORY OF HAMPSHIRE

parts of the walls, and especially the foundations of the towers, were observed in 1804-5 to contain Roman sculptured and worked stones, cornices, capitals, and copings from some earlier building. But no actual trace of such buildings has been found unless it be two clay floors, one in the inner and one in the outer area, a fragment of stucco painted red and white, and many bricks and tiles of various shapes. The site has, however, been occupied more or less continuously since the Saxon period; its ruins have been pillaged for building stone, and without careful excavation we could hardly hope to discover foundations. Traces of Roman life, however, abound. A group of milestones (of the period A.D. 238-275) and an altar to an otherwise unknown goddess, Ancasta, were found in 1804-5, some of them perhaps in the walls. Minor objects are common; much Samian and other pottery, a little glass, bone pins and the like, and occur both in the inner and outer area. The coins cover the whole Imperial period till about 380 A.D. In a large collection which Lady Macnaghten allowed me to look through in 1898, the commonest seemed to belong to A.D. 250-350, the least common to A.D. 150-250. A few burials have also been found, urns and glass containing burnt ashes and bones, outside the outer defences. Fifty or more skeletons in coffins laid east and west were discovered about the year 1800, but they are probably post-Roman.<sup>1</sup>

To the remains found near Bitterne Manor itself we must add a few from the opposite bank of the Itchen; they are unimportant. Coins have been found in Portswood and St. Denys (first and second 'brass' of the second century), in St. Mary's (fourth century) and Northam and on Bevois Hill. In 1852 a few skeletons, apparently buried in wooden coffins, and some pottery were found in making a new road near St. Denys, and in 1868 some sculptured pieces were found on Bevois Hill, and, without valid reason, pronounced to be possibly Roman.<sup>2</sup> Extensive as recent building operations have been in these suburbs of Southampton, this seems the sum total of discoveries. It just shows that the west bank of the Itchen was not wholly desolate in Roman days. Dr. Speed, writing in the last century,<sup>3</sup> says that old men could then remember a ford across the river at this point; this ford may be as old as Clausentum, and the remains on the west bank may be due to it.

Such in detail are the features of Clausentum; what sort of picture

<sup>1</sup> Most of the discoveries mentioned above were made in 1799 when the Northam bridge was built, and in 1804-5 when the Manor House was altered. These discoveries have been recorded by Sir Henry Englefield in the *Hampshire Repository*, i. 113, ii. 295, and in two 'Letters' appended to the second edition of his *Walk through Southampton* (Southampton, 1805). They have been summarized by C. Roach Smith in the Winchester volume of the British Archæological Association, 161-170. Among later writers see J. S. Davies, *History of Southampton* (Southampton, 1883), who quotes from the papers of John Speed, an eighteenth-century local antiquary. R. Warner's *Attempt to Ascertain the Site of Clausentum* (London, 1792) is worthless.

<sup>2</sup> Englefield's *Walk through Southampton*, p. 81 (ed. 2); Wilks, ii. 146; *Hampshire Field Club*, i. (1) 42; *Journal of the British Archæological Association*, xi. 338, xxiv. 399. See further in the Index.

<sup>3</sup> Quoted by J. S. Davies, *History of Southampton*



## ROMANO-BRITISH HAMPSHIRE

do they form when combined? In the first place, one feature is un-Roman. It is no ordinary Roman device to fortify a little peninsula by two lines of defences along its landward side. Such fortifications can be seen on many English headlands, but never among Roman works. It is impossible not to suspect either that the inhabitants of the Roman period settled down among more ancient earthworks or else that some later men additionally intrenched themselves on a Roman site, or that the Romans themselves first occupied the larger area, and later confined themselves to the inner area. Of the three, perhaps the last is the most likely. The wall of the inner area is Roman work of the late third or the fourth century. Its general character, its round towers, its inclusion of worked stones from earlier buildings, all assign it that date, and the milestones, if (as I think) they also were found in the wall, confirm it. It is one of those walls to which we have already alluded (p. 276), which in the later days of the Empire were built, with free use of earlier material, to keep back the barbarian. Further than this our evidence does not at present allow us to advance with certainty. Most writers call Clausentum a fort, and point to its strategic situation at the mouth of the Itchen valley. The size and area of the place, so far as we know them, neither suggest nor preclude such a notion.<sup>1</sup> The inscriptions and other finds show no military characteristics, and the architectural fragments indicate a building for other than military purposes. On the other hand no tessellated pavements or hypocausts or other appurtenances of civil life have been recorded; else we might suppose the place a little settlement which, like so many larger towns, fortified itself in the days of danger. We must end with a hypothesis. If Clausentum was a fort, it was a fort only in the fourth century, and before it became a fort it was something else. One thing it was not. Stukeley took the mint marks **MC**, **SC**, and the like on certain Roman coins to imply a mint at Clausentum: **MC**, for instance, he interpreted as *Moneta Clausenti*. This idea may be wholly discarded. These mint marks do not mean what Stukeley thought, nor could Clausentum have been a mint. Neither in a fort nor in a little country town would the Roman Government have established an institution which it guarded so jealously and restricted so narrowly.

### INSCRIPTIONS FOUND AT BITTERNE

1. Altar, of Binstead or similar limestone from the Isle of Wight, 3 feet high by 10 inches across the inscribed face. Found in 1804-5, apparently in the Roman wall (see below), and now at Bitterne Manor, where I copied it in 1898.

<sup>1</sup> The usual forts of the earlier Empire are oblong areas of 3 to 6 acres. The forts of the fourth century are larger and less regular in shape. Of fourth-century forts in Britain, Lymne is as large and Pevensey as irregular as we suppose Clausentum to have been.

## A HISTORY OF HAMPSHIRE

DEAE  
ANCA  
STAEG  
EMINV  
SMANI  
VSLM

*Deae Ancastae Geminus Man.. v(otum) s(olvit)  
l(ibens) m(ento).*

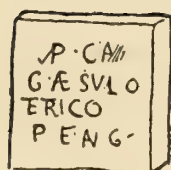
‘Dedicated to Ancasta in performance of a vow.’

The last word in line 5 has been read *Manti*, ‘son of Mantus,’ but **MAN** alone is certain. The goddess Ancasta is otherwise unknown. She has, of course, no connection with any river Anton or Trisanton.<sup>1</sup>

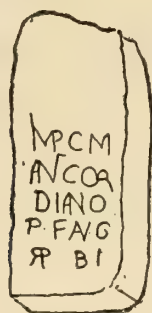
2–8. *Milestones.* It was not unusual to put up a new milestone, or to reinscribe an old one, for each new Emperor. In consequence, little groups of discarded milestones grew up round the ends of miles, each of these discarded stones having in turn marked the mile and, when done with, been tossed aside to lie with its discarded fellows. Such a group seems to have existed at Bitterne. Like very many third and fourth century milestones, these do not give distances (except, perhaps, No. 8) ; they are roadstones rather than milestones.

2. Milestone of Gordian (238–244 A.D.), a rudely-cut squared stone 28 inches high. Found in 1804–5, apparently in the Roman wall, but now lost.

*Imp(eratore) C(æsare) M(arco) Ant(onio) Gordiano p(io) f(elice)  
Aug(usto) RPBI.*



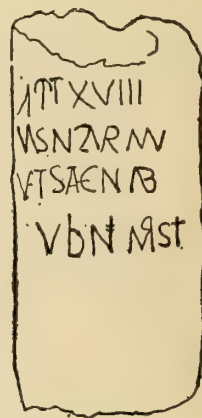
4.



2.



3.



8.

FIGS. 30.

‘Erected when M. Antonius Gordianus, pious and happy, was Emperor.’ The sense of the last line is unknown ; it may have been miscopied. Naturally one would explain RP as *respublica*, but the community of the Belgæ can hardly have been meant.<sup>2</sup>

3. Milestone of Gallus and Volusianus (251–253 A.D.), a rudely-cut squared stone, 33 inches high by 15 inches wide. Found in 1804–5, apparently in the Roman wall, but now lost.

<sup>1</sup> Englefield, *Walk through Southampton* (ed. 2), p. 123 ; hence later writers. He means, as I understand him, and as he has been generally understood, that the altar was found in the walls with other inscriptions and carved and worked stones from older buildings, but his language is not quite so precise as might be wished. It is quite plain, in any case, that the stone was found in 1804–5, when the stones in the wall were found.

<sup>2</sup> Englefield, p. 125. The remarks made about the provenance of No. 1 apply also to this stone.



## ROMANO-BRITISH HAMPSHIRE

*Imp(eratoribus) (Cæsaribus) Gallo et Volusiano Aug(ustis).*

‘Erected in the reign of Gallus and Volusianus.’<sup>1</sup>

4. Milestone of Tetricus (267–273 A.D.), a square stone of very neat workmanship, about 15 inches high and wide. Found in 1804–5, perhaps in the walls; now lost.

*[I]mp(eratore) Ca[es(are)] C(aio) [Pio] Esuvio Tetrico p(io) f(elice) Aug(usto).*

‘Erected in the reign of C. Pius Esuvius Tetricus.’<sup>2</sup>

5. Milestone of Tetricus (267–273 A.D.), found at Bitterne and now there. Copied by myself in 1898.

≡ MCES ≡ ≡ SVVIO TETRIC VSPFAV≡	<i>Im(peratore) C(a)es. [E]suvio Tetricus p(ius) f(elix) Au[g].</i> ‘Set up in the reign of the Emperor Esuvius Tetricus.’ <sup>3</sup>
--	--

6. Milestone of Tetricus (267–273 A.D.), a rough slab of freestone 30 inches high by 18 inches wide and a foot thick. Found by Mr. C. Roach Smith lying in the garden in 1841, and now (1898) there. Copied by myself.

*Imp(eratore) C(æsa)re C(aio) Pio Esuio Tetrico p(io) f(elice) Augusto.*

‘Erected in the reign of Tetricus.’ *Ag.* is a common abbreviation or miswriting on later Latin inscriptions for ‘Augustus.’ Perhaps it is an indication of the phonetic process by which, for example, Augustine became Austin and Augusta Aosta.<sup>4</sup>

7. Milestone of Aurelian (270–275 A.D.), dug up at Bitterne in or before 1804, but where exactly is not stated; now lost.

INP CÆS LV CIO DOMI TIOΛPLIAVO	<i>Imp(eratore) Cæs(are) Lucio Domitio A[ure]liano.</i> ‘Set up in the reign of Aurelian.’ <sup>5</sup>
--------------------------------------	--

8. Large illegible piece of column, 36 inches high by 18 inches in diameter, found at Bitterne in 1804–5, apparently in the walls; now lost. Nothing can be made of Sir Henry Englefield’s copy, the only one surviving, except that it seems to give a distinct **MPXVIII** or **MPLXVIII** at the top, in the fashion of some milliaries. There is, however, no Roman site which is distant from Bitterne approximately 18 or 68 Roman miles.<sup>6</sup>

To this list should be added one, if not two, totally illegible

<sup>1</sup> Englefield, p. 126. The remarks made about the provenance of No. 1 apply also to this stone.

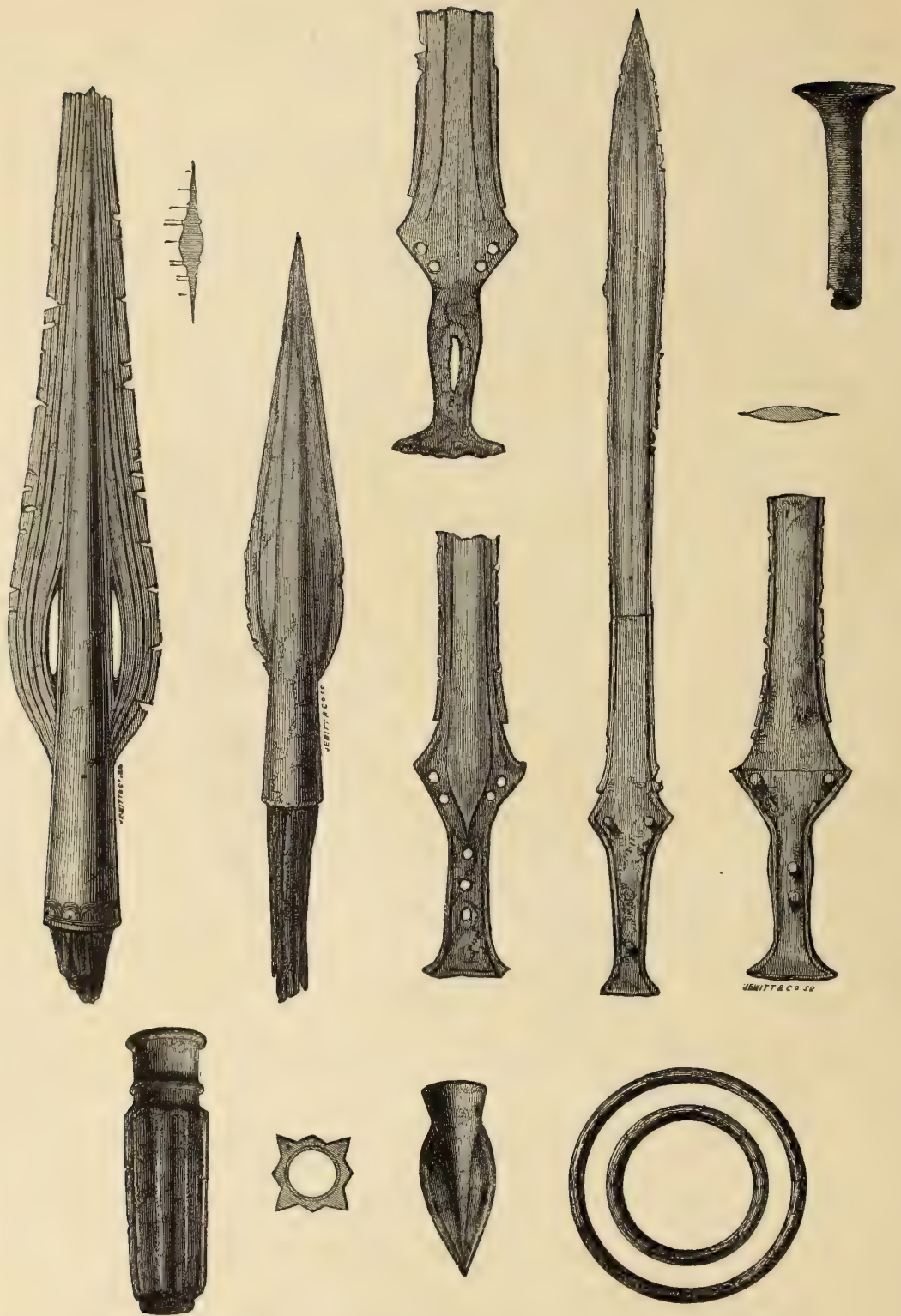
<sup>2</sup> *Ibid.*, p. 127. The remarks made on the provenance of No. 1 apply also to this stone.

<sup>3</sup> Kell, *Journal of the British Archæological Association*, xiii. 207. No record of its finding seems preserved, but it may be the same stone as No. 4.

<sup>4</sup> C. Roach Smith, *Archæologia*, xxix. 257. The shape of this stone shows that it cannot be merely No. 4 read differently.

<sup>5</sup> Englefield, p. 123. Not found with No. 1 and its comrades.

<sup>6</sup> *Ibid.*, p. 124. The remarks made on the provenance of No. 1 apply also to this stone. *Ephemeris Epigr.*, iv. p. 204.



FIGS. 31. BRONZE WEAPONS FOUND NEAR HOGMOOR (p. 341).

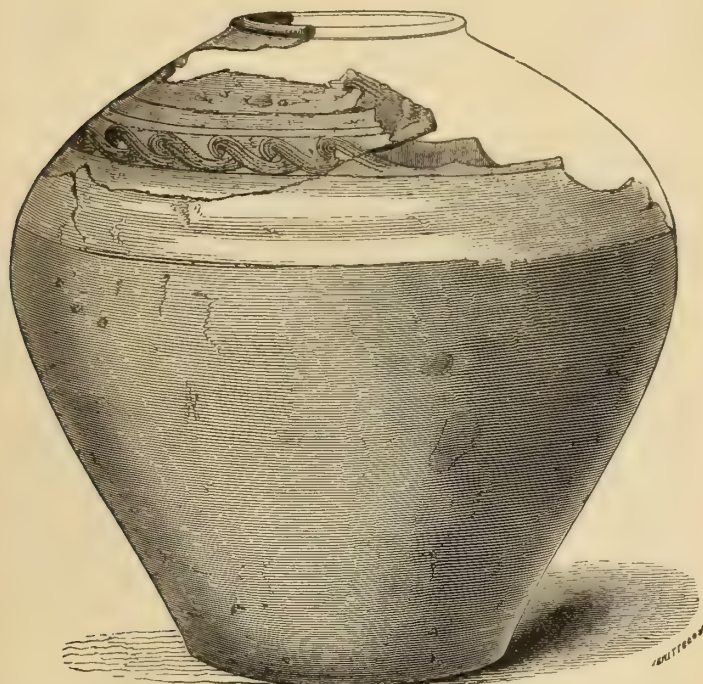


## ROMANO-BRITISH HAMPSHIRE

stones. In 1898 I saw at Bitterne half of a large ansate slab which had plainly once been inscribed. Sir Henry Englefield also mentions an illegible stone.

### 10. MISCELLANEOUS DISCOVERIES : THE BLACKMOOR HOARD

We have now described the Roman remains of Hampshire so far as they indicate any form of settled and permanent life—the towns,



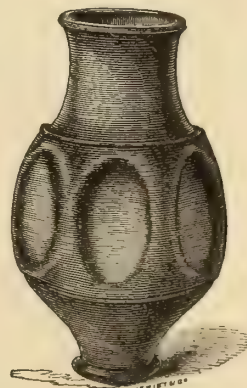
SEPULCHRAL URN.



BRONZE  
HANDLE (?).



BRONZE CELT FOUND NEAR BLACKMOOR HOUSE.



CUP OF NEW FOREST WARE FOUND NEAR  
BLACKMOOR HOUSE.

FIGS. 32. OBJECTS FOUND NEAR BLACKMOOR HOUSE, 1867-68 (p. 341).

‘villas,’ and roads, the potteries and the fortresses. We shall proceed to summarise, in the alphabetical list with which this article concludes, the other Roman remains found in the county, which do not come within the category just mentioned. These are the scattered coins or pottery or other objects which have been found sporadically, and, so far as we can interpret them, seem due to chance and isolated circumstances. Such objects do not materially assist our conceptions of

## A HISTORY OF HAMPSHIRE

Roman Hampshire, and they do not therefore need a detailed exposition in these pages. For example, discoveries of coins apart from other objects are not very instructive or interesting to the topographer or local historian. Hoards of coins have their own value for the student of political economy, for when collected and classified they often reveal secrets in the history of ancient currency. But they do not so often illustrate the occupation or character of a particular district. Sometimes they are found in the vicinity of dwelling-houses, buried, it may be, in a back garden which the owner had constantly under his eye, like the jarful of denarii found at Silchester in 1894. But frequently they occur in spots which are remote from known habitation, and they prove nothing or next to nothing about the history of these spots.

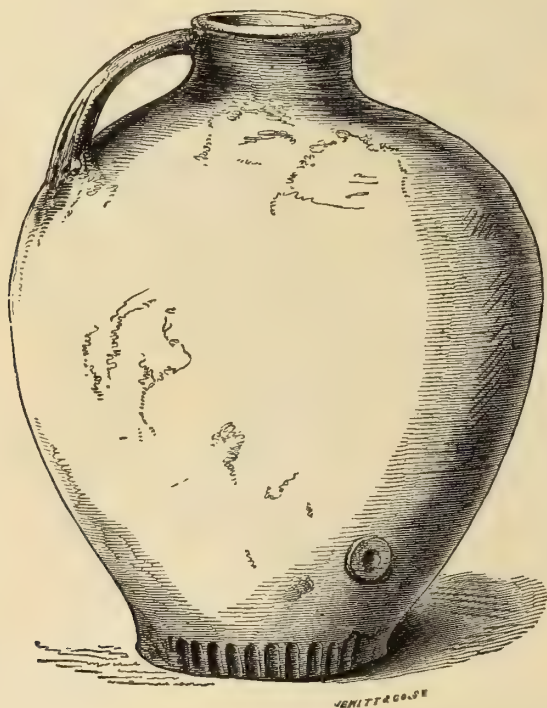


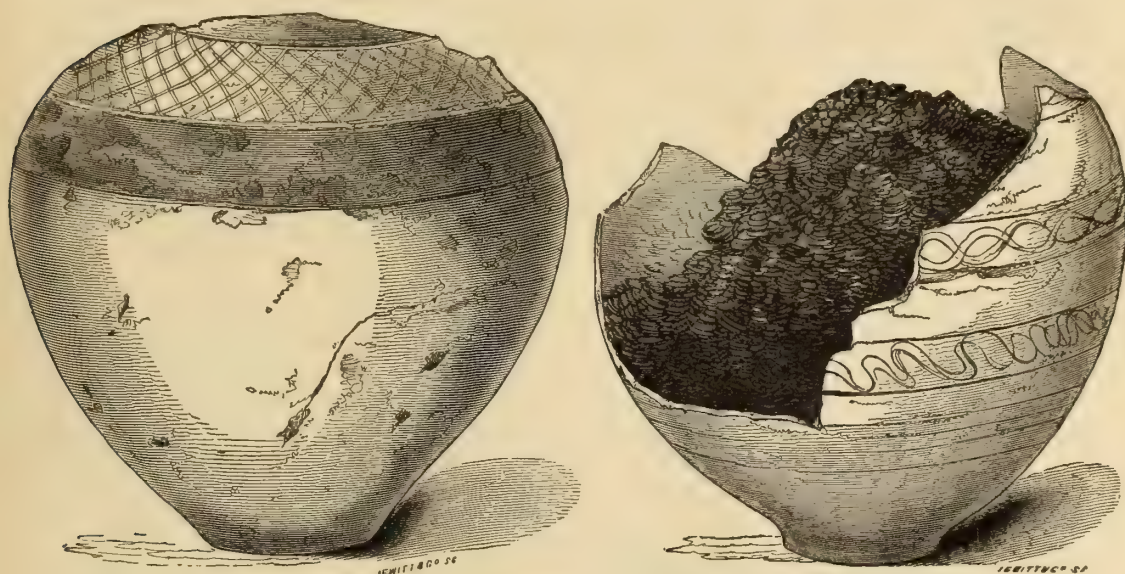
FIG. 33. URN FOUND NEAR BLACKMOOR HOUSE.

But one little group of these sporadic finds merits fuller notice than we could give it in the alphabetical summary; we mean the coins and other objects discovered near Blackmoor House, in the parish of Selborne, and within the area of Woolmer Forest. These are numerous and striking. In 1741, as Gilbert White records in his *Natural History of Selborne*, Woolmer Pond dried up, and several hundred copper coins and some medallions were discovered lying together as though they had been in a sack. A few, which White saw, were coins of Marcus and his wife Faustina. In 1774 more coins (of what metal is not stated) were found at the pond, enclosed in an urn, and representing all the Emperors from Claudius to Commodus (A.D. 43–192). In 1867, when the late Lord Selborne rebuilt Blackmoor House, several finds were made—a sepulchral urn (fig. 32). containing a bronze enamelled cup, a bronze



## ROMANO-BRITISH HAMPSHIRE

patera, a worn coin of Lucius Verus, and bones ; some Samian and other pottery ; iron axe-heads, etc.; many tiles, perhaps indicating a dwelling (p. 306). About the same time bronze sword-blades and spear-heads (fig. 31), and near them about 100 coins of Gallienus, the Tetrici, and Victorinus (A.D. 253–273), in an urn, were discovered just a mile north of Blackmoor House, towards Hogmoor ; and a mile west of the latter, at the reservoir near Temple Hanger, some pottery was met with. Lastly, in 1873 an enormous hoard of coins, stowed in two jars (fig. 34), was dug up about a quarter of a mile north-west of Woolmer Pond, and half-way between it and Blackmoor House. This hoard, when perfect, must have exceeded 30,000 coins ; 29,802, mostly ‘third brass,’ but a few billon ‘denarii,’ were actually obtained, and 29,786 were catalogued, as follows :<sup>1</sup>—



FIGS. 34. URNS CONTAINING THE BLACKMOOR HOARD.

Gordianus III.	.	.	2	Claudius II.	.	.	4,213
Philip	.	.	1	Quintillus	.	.	188
Otacilia	.	.	1	Aurelianus	.	.	175
Gallus	.	.	1	Severina.	.	.	14
Volusianus	.	.	1	Tacitus	.	.	214
Valerianus	.	.	25	Florianus	.	.	18
Val. iunior	.	.	2	Probus	.	.	431
Gallienus	.	.	3,475	Carus	.	.	12
Salonina	.	.	331	Carinus	.	.	24
Saloninus	.	.	7	Magnia Urbica	.	.	2
Iul. Gallienus (?)	.	.	2	Numerianus	.	.	14
Postumus	.	.	331	Diocletianus (284–305 A.D.)	.	.	75
Lælianus	.	.	8	Maximianus (285–305)	.	.	53
Victorinus	.	.	5,450	Carausius (287–293)	.	.	545
Marius	.	.	60	Allectus (294–297)	.	.	90
Tetricus (father and son)	.	.	14,028	Constantius Chlorus (as Cæsar) (292–306)	.	.	1

<sup>1</sup> No record apparently exists of whether the coins in the two jars differed at all. Very often the coins in large hoards seem to have been sorted in one way or another.

## A HISTORY OF HAMPSHIRE

The hoard contains coins of the last sixty years of the third century, at the close of which it was deposited or lost. The occurrence of coins of Allectus shows that this took place after 294 ; the relative fewness of the coins of Diocletian and Maximian, and especially of Chlorus, show that it took place not long after that date, and the inference is confirmed by the fact that the coins of these three emperors, so far as they can be dated, belong to their earlier issues. We may with great probability connect the hoard with the troubles of that age. In 296-297 Allectus, the usurping Emperor in Britain, was overthrown and slain by the armies of Constantius Chlorus. It has even been conjectured by the late Lord Selborne that the hoard formed part of the army-chest of Allectus, and the theory has a certain geographical plausibility. The troops of Chlorus appear to have landed on or near the coast of Hampshire, and their victory over Allectus may have taken place within the area of our county. This, however, cannot be proved, and large



FIGS. 35. COINS OF CARAUSIUS, TACITUS AND DIOCLETIAN, FROM THE BLACKMOOR HOARD OF 1873

hoards are not so uncommon that we need call in the army to justify their occurrence. The value of Roman 'third brass' near the end of the third century was not very great. One gold piece was probably equal to several thousands of them, and the worth of the Blackmoor hoard may easily be over-estimated. By way of parallel, we may cite a hoard found at Chimay in France, in 1835, of almost the same size :—

Valerianus . . . . .	30	Victorinus . . . . .	2,700
Mariniana . . . . .	2	Marius . . . . .	21
Gallienus . . . . .	2,200	Tetricus (father and son). .	18,500
Saloninus . . . . .	235	Claudius II. . . . .	1,900
Valerian iunior . . . . .	10	Quintillus . . . . .	124
Postumus . . . . .	160	Aurelian . . . . .	46
Lælianus . . . . .	8		

It is a further question whether the other coins and objects found near Blackmoor House belong to the same period of deposit as the large hoard. The 100 coins found on Hogmoor may well do so. The coins found in Woolmer Pond are less easy to fix. In general, coins of the first and second centuries are not found in great frequency with coins of the late third century, but instances are nevertheless not uncommon.



## ROMANO-BRITISH HAMPSHIRE

A hoard of coins found at Le Veillon in La Vendée contained : firstly, a vase with gold objects ; secondly, a vase with about 600 ‘denarii’ of the period A.D. 60–200 ; and thirdly, a vast number of ‘third brass,’ probably 30,000, extending down to A.D. 267, and packed in sacks. A hoard found at Famars, buried about A.D. 308, contained a vase with ‘denarii’ earlier than A.D. 200, another vase (or others) with silver of Diocletian and Constantine, and other vases with billon, etc., of the third century, the total of coins exceeding 27,000. A hoard found at Lengerich, in Hanover, contained some gold objects and coins, 1,200 ‘denarii’ of the second century, and some silver of the fourth century. It is plain, therefore, that at least some portions of the first and second century currency survived and were reckoned valuable in the fourth century, but beyond this it seems rash to venture. The earlier finds at Blackmoor are too little known, and the distances between their places of origin are too great, to allow of a definite conclusion. Similarly with respect to the weapons and other objects. Further exploration is needed to elucidate fully the meaning of these remains. We must conclude our sketch of Roman Hampshire with doubt and uncertainty. The broad features of the district are plain, but the smaller touches of detail can only be inserted with the aid of judicious and scientific excavation.<sup>1</sup>

### II. INDEX

The following is an alphabetical list of all the principal places where Roman remains have been found, or supposed, in Hampshire. For the places where vestiges of permanent occupation have been found, it has seemed sufficient to refer to the preceding descriptions ; for the other, the character of the remains is briefly indicated, and the chief printed books mentioning them are named.

- ABBOTS ANN . . . Villa : p. 300.  
 ALICE HOLT . . . Potteries : p. 306.  
 ALLINGTON . . . Hoard of coins in a jar, found 1869 : 1 gold Arcadius and 47 silver, viz., 7 Julian, 1 Valentinian, 7 Valens, 8 Gratian, 2 Theodosius, 2 Magnus Maximus, 7 Arcadius, 13 Honorius, the rest uncertain. The hoard must have been deposited early in the fifth century. [*Numismatic Chronicle*, ix. (1869) 72 ; *Archæological Journal*, xxviii. 171].  
 ALTON . . . Perhaps villa : p. 306.  
 AMBERWOOD . . . New Forest potteries : p. 326.  
 ANDOVER . . . Coins of Tetricus and Victorinus [*Journal of the British Archæological Association*, xii. 352].  
 APPLESRAW . . . ‘Villas,’ etc. : p. 295.  
 ASHLEY . . . Earthworks, coins [*Hants Field Club*, ii. 201] : see Westwood, p. 312.  
 BADNAM CREEK . . . Tiles and pottery [*Hants Field Club*, ii. 196 ; Hartley Institution] : see p. 310.  
 BARTON . . . See Bishopstoke.  
 BASINGSTOKOE . . . Dwelling : p. 305.  
     At Winklebury Camp : Samian pottery [*Archæological Journal*, iii. 169 ; *Hants Field Club*, I. i. 26].  
     On L.S.W.R. line between Basingstoke and Andover, elaborate bronze ornament [*Proceedings of the Soc. of Antiquaries*, ii. 2 (1861), 35 ; *Archæological Journal*, xix. 82].

---

<sup>1</sup> For the Blackmoor finds see Lord Selborne in *Numismatic Chronicle*, xvii. (1877) 9 ; White’s *Selborne* (Buckland and Selborne’s ed., 1880), pp. 354, 463, 559 foll.

## A HISTORY OF HAMPSHIRE

- BEACON HILL . . . One or two coins [*Hants Field Club*, iii. 177].
- BEAULIEU . . . Two coins of Valerian and Salonina [*Hants Field Club*, I. i. 44].
- BERE HILL . . . Near Andover: seven coins of various dates [*Andover Advertiser*, quoted by Jos. Stevens, *Hist. of St. Mary Bourne*, p. 58]: see also p. 304.
- BIGHTON WOODCOTE See Old Alresford.
- BINSTED . . . Supposed 'villa,' sarcophagus: see p. 305.
- BISHOPSTOKE . . . Lead coffin, originally cased in wood, containing a female skeleton and some thin glass bottles, found in 1864 at Barton (?), a mile north of Bishopstoke station, in digging gravel close to the railway [*Gentleman's Magazine*, 1864 (i.), 330; C. R. Smith, *Coll. Antiqua*, vii. 191; *Proceedings of the Soc. of Antiquaries*, xxi. 99; *Journal of the British Archæological Association*, xx. 88, 199; *Archæological Journal*, xxi. 99; *Intellectual Observer*, vii. 392].
- BISHOPS WALTHAM Alleged site of Clausentum: p. 324.  
'Villa' at Lock's Farm; hoard of coins near: p. 309.
- BITTERNE . . . Extensive remains, fort (?): p. 320. A small pot filled with coins of Allectus was found here about 1799, but exactly where, I do not know [*Hampshire Repository*, i. 113].
- BLACKMOOR . . . Large hoards, etc.; perhaps a 'villa': pp. 306, 339.
- BOSSINGTON . . . Leaden pig: p. 323. The bronze sword found here about 1887 is not Roman.
- BOTLEY . . . Perhaps 'villa' at Fairthorn: p. 310.
- BRAMDEAN . . . Fine 'villa': p. 307.
- BROOKHEATH . . . In Rockbourne parish, near Fordingbridge. Hoard of 4020 'third brass' found in an urn about 1893: uncatalogued.
- BROUGHTON . . . Alleged 'villa' and station, Brige: pp. 312, 322.
- BUCKHOLT . . . Alleged glass works, really mediæval: pp. 312, 322.
- BULLINGTON . . . Minor finds at Tidbury Rings [Ordnance Maps. Gough's Additions to *Camden* (ed. 4), i. 192, ascribe Roman wells, squared stones and coins to Bullingham: see Warner's *Collections*, i. 109].
- BURGHCLERE . . . Skeletons, glass, pottery, large iron nails (such as are often found in graves, and probably denote wooden coffins), found about 1868 on Ridge Moor Farm [*Proceedings of the Soc. of Antiquaries*, II. iv. 3, 125: Newbury Museum]. Beaconhill (supra) is in this parish.
- BURSLEDON . . . See Badnam Creek, p. 310.
- CANDOVER (BROWN) Urn and three skeletons; coins alleged to have been found near [Winchester volume of the Archæological Institute, p. xl.].
- CHILTON . . . 'Villa' in Stanchester Field: p. 306.
- PRESTON . . . 'Villa' in Chapelfield: p. 306. Coin of Lucius Verus elsewhere in the parish.
- CASTLEFIELD . . . Near Andover. Building: p. 302.
- CHERITON . . . Gold coin of Tiberius [*Hants Field Club*, iv. 147].
- CHILBOLTON . . . Ashes, barrow with bones, coin of Constantine I., found 1891 [*Hampshire Antiquary and Naturalist*, i. 24].
- CHRISTCHURCH . . . No Roman remains have been found here. Those alleged in *Archæologia*, iv. 414, xvi. 363, *Archæological Review*, iv. 69, seem not to be Roman, nor are the earthworks at the mouth of the harbour Roman. The Roman 'camp' and 'watchtowers' on St. Catherine's Hill, 2 miles north of the town (*Ordnance Survey*, lxxxvi. N.E.), are equally unsubstantiated.
- CLANVILLE . . . 'Villa': p. 295.
- COMPTON . . . Coin of Constantine period, near old canal [W. H. Jacob].
- CORHAMPTON . . . 'Villa' at Littleton: p. 309.
- CROCKLE HILL . . . New Forest potteries: p. 326.
- CRONDALL . . . 'Villa' at Badley (or Barley) Pound: p. 305.
- CRUX EASTON . . . Skeleton with urn at its head, found at the Rectory in 1856 [Jos. Stevens' *Hist. of St. Mary Bourne*, p. 72; *Proceedings of the Soc. of Antiquaries*, I. iv. 335].
- DIBDEN . . . See Eling for coins: see p. 325 for alleged road.



## ROMANO-BRITISH HAMPSHIRE

- EGGBURY (EGBURY) Pre-Roman earthwork ; a few Roman coins of circa A.D. 250 in and near it [Wilks, iii. 192 ; Jos. Stevens' *Hist. of St. Mary Bourne*, 39, 57, 59 ; *Hants Field Club*, iii. 178].
- ELING . . . . Hoard of coins found in the 18th century at Bury Farm, then the residence of Sir Charles Mills : the house is half way between Eling and Marchwood and north of Dibden [Brayley and Britten, p. 202].
- ENHAM . . . . Perhaps a 'villa' : p. 304.
- EXBURY . . . . No Roman remains ; supposed crossing at Lepe to the Isle of Wight : p. 325.
- EXTON . . . . Silver ring, but probably mediæval [*Archæological Journal*, xvi. 362].
- FAREHAM . . . . Brickfields near [T. W. Shore].
- FINKLEY . . . . Building in Nuttlefield : p. 303.  
Pottery at Finkley Down Farm, Wellpiece field [Andover Museum].
- FORDINGBRIDGE . See Brookheath. At Godshill, too, Roman coins have been found [*Journal of the British Archæological Association*, xxii. 358].
- FROXFIELD . . . Building : p. 308.
- FURGO HILL . . Pottery at Furgo or Firgrove, Longparish [Jos. Stevens' *Hist. of St. Mary Bourne*, 72].
- HALLCOURT WOOD Kiln and fragments of pottery found 1889 [*Arch. Review*, iv. 69, etc.]. The wood is near Shedfield and Botley.
- HAYLING ISLAND . Building in Towncil field : p. 310.
- HOLBURY . . . . Building : see Westdean, p. 312.
- HOLYBOURNE . . See Alton : p. 306.
- HORNDEAN . . . Coin of Diocletian [*Archæological Journal*, xxix. 187].
- HOUNDSDOWN HILL Four coins of Postumus and Gallienus, with urn, found 1814 [Hartley Institution].
- HURSTBOURNE 'Villa' at New Barn Down : p. 304. Tile and pottery in church-  
PRIORS yard : p. 305.  
Pits, rude Romano-British pottery, at the railway station, in 1871 [Jos. Stevens, *Hist. of St. Mary Bourne*, p. 25].
- TARRANT . . Pottery [*Journal of the British Archæological Association*, xxiii. 280 ; *Hants Field Club*, iii. 177].
- IDSWORTH . . . See Rowlands Castle : p. 310.
- ITCHEN ABBAS . . 'Villa' : see p. 307.
- KINGSCLERE . . . Coins [*Hants Field Club*, iii. 177].
- LANHAM DOWN . See Old Alresford.
- LATCHMORE GREEN Pottery [Ordnance Survey].
- LEPE . . . . . See Exbury.
- LINK . . . . . See S. Mary Bourne.
- LONGSTOCK . . . Possible trace of a 'villa' : p. 313.
- LYMINGTON . . . Hoard of 200 pounds weight of late Roman copper coins found in two urns ; another hoard (or the same) found in Norley Wood ; coins of Tetricus, probably from one of these hoards ; coins of Claudius found near Buckland Rings [Gough's *Camdeni*, 187 ; Warner's *Topography*, i. pp. 9, 45 ; Wilks, iii. 44 ; *Journal of the British Archæological Association*, xxii. 358]. Buckland Rings itself is not a Roman work.
- MIDDENBURY . . Coin of Domitian found 1878 [*Hampshire Field Club*, I. i. 43].
- MITCHELDEVER . 'Villa' and hoard of 4th century coins : p. 307.
- NEATHAM . . . . See Alton.
- NETLEY . . . . . Hoard of more than 1,821 'third brass' coins of A.D. 253-275 [*Numismatic Chronicle*, xxi. 28 ; *Journal of British Archæological Association*, xxiii. 168 ; *Hants Field Club*, I. i. 42].
- NEW BARN DOWN . 'Villa' : p. 304.
- NEW FOREST . . Potteries : p. 326.  
Coins of Gallienus, Victorinus, etc., at Pond Head [*Proceedings of the Numismatic Society*, xxxiii. Nov. 1843].  
Coins of Nero, Vespasian, Domitian, Trajan, Pius, Marcus, Faustina, apparently all copper, found 1881 at No Man's Land, near Bramshaw [*Hants Field Club*, I. i. 44].

# A HISTORY OF HAMPSHIRE

- NORTHINGTON . . . Coins at Totford [Duthy : p. 148].
- NURSLING . . . 'Villa' or village : p. 311.
- OAKLEY . . . . Copper coin of Vespasian [Gough's *Camden*, I. 203].
- ODIHAM . . . . Gold ring with figure of Victory [*Proceedings of the Society of Antiquaries*, II. iii. 239]. Also gold fibula, perhaps showing Late Celtic influence [*Archæological Journal*, II. 46].
- OLD ALRESFORD . . Supposed 'villa' : p. 306.
- OLD WINCHESTER . Pre-Roman 'camp' ; Roman lamp (supposed), found 1834 [Lewis' HILL *Topographical Dictionary*, III. (ed. 1843) ; C. R. Smith's *Journal of the British Archæological Association*, XL. 227 ; Winchester Volume of the Archæological Institute, p. xl. ; *Hants Field Club*, I. i. 23].
- OTTERBOURNE . . . Bronze object, described as head or medallion of Julius Cæsar. formerly in the collection of Mr. J. M. Hughes, now apparently lost [Milner's *Winchester*, i. 13 (15) ; Winchester Volume of the Archæological Institute, p. xl. ; private information].
- OVERTON . . . . Late coins [*Hants Field Club*, iii. 177] ; three urns of coarse black ware found, with coins, about 1849, now in Winchester Museum.
- POPHAM . . . . 'Villa' at College Wood : p. 306 ; road called Popham Lane : p. 321.
- PORCHESTER . . . Fort : p. 329.  
At Paulsgrove, skeletons and coins [T. W. Shore in *Hampshire Naturalist and Antiquary*, i. 25]. Various finds of pottery have been made in Porchester Creek and Portsmouth Harbour [*Archæological Journal*, xvi. 200 ; *Hants Field Club*, II. 196 ; Winchester Museum. The *Gentleman's Magazine*, 1780, 361, mentions a gold Syracusan coin].
- POWDERHAM . . . See Crondall : p. 305.
- RAMRIDGE . . . . Supposed house or hut : p. 297.
- REDENHAM . . . . 'Villa' : p. 294.
- RINGWOOD . . . . Identified by Camden and others with 'Regnum' ; but no Roman remains have been found here.
- ROMSEY . . . . Stukeley, Reynolds, and others have called Romsey Roman, but only because of its first syllable ; no Roman remains have been found here, and it cannot be considered a Roman town. A gold *torque* sometimes adduced as proof is pre-Roman [*Archæologia*, xxxix. 505 ; Gough's *Camden*, i. 193 ; Reynolds, p. 459].  
(near) Hoard of Valerian, Gallienus, Victorinus, etc. (third brass), found in 1845 near Abbotswood, on the farm of Mr. Clarke, of Timsbury [Wilks, i. 368 ; *Journal of the British Archæological Association*, i. 257, iii. 59].
- ROPLEY . . . . Gold torque, called Roman, but doubtless pre-Roman [Winchester Volume of the Archæological Institute ; *Gentleman's Magazine*, 1843 (ii.), 240].
- ROWLANDS CASTLE 'Villa' and other remains : p. 310.
- ST. MARY BOURNE Perhaps 'villa' or hut at Lower Link : p. 304. Pottery at many sites, e.g. Binley, Warwick, Cowlease : p. 304, *Hants Field Club*, iii. 157. Fragments from vicarage garden, found by Mr. Kell, 1869, Andover Museum. See also Wick below.
- SELBORNE . . . . See Blackmoor.
- SHALDEN . . . . Roman remains found 1854 near Manor Farm [Ordnance Survey].  
The site adjoins Alton, of which it lies north.
- SHAWFORD . . . . Two coins of Constantine on Mr. J. G. Cowley's land [W. H. Jacob].
- SHEDFIELD . . . . See Hall Court Wood.
- SHERBORNE ST. . . . Coins in a chalk pit towards Basingstoke [*Hants Field Club*, iii. 177].  
JOHN For The Wyne, see under V.
- SHODDESDON . . . Hut : p. 295.
- SHOLING . . . . Coins : 1 Postumus, 3 Victorinus : 5 Tetricus [Hartley Institution].
- SHRONER . . . . Pottery, near Roman road from Winchester to Silchester, 5 miles north of Winchester [W. H. Jacob].
- SILCHESTER . . . Town : p. 271 foll.



## ROMANO-BRITISH HAMPSHIRE

- SOUTHAMPTON . . . Chance finds opposite Bitterne : p. 334. Add pottery fragments found in erecting Park railings, and coin of Constantine II. found at Ordnance Office [Hartley Institution] ; amphoræ found in the mud of Southampton Water [*Hants Field Club*, ii. 196] ; pottery found in road-making at Freemantle [Wilks, ii. 341].
- SPARSHOLT . . . 'Villa' : see Westwood, p. 312.
- SOUTHWICK . . . Remains found in the woods north of Southwick Park [Ordnance Survey].
- STANCHESTER . . . 'Villa' : see Candover, p. 306.
- STONEHAM . . . A few coins in South Stoneham [*Journal of the British Archæological Association*, xxii. 358]. The idea that there was a Roman 'station' here rests on no adequate evidence. The name of Doncaster Farm, sometimes quoted in proof, is probably a modern name : for philological reasons it cannot go back to an Anglo-Saxon 'ceaster,' which would become in Hampshire Donchester or the like. Bede's *Ad Lapidem* (*Hist. Eccl.* iv. 16) was somewhere in this neighbourhood, perhaps at Stoneham perhaps at Stone, near Netley ; but that name does not prove a Roman 'station.'
- THRUXTON . . . 'Villa' : p. 298.
- TITCHFIELD . . . Samian fragments in river deposit [*Hants Field Club*, ii. 196 ; Hartley Institution].
- TWYFORD . . . 'Villa' or 'villas' : p. 309.
- UPHAM . . . Supposed 'villa' : p. 309.
- VYNE, THE . . . Earthwork, probably not Roman. The name of the place is old (Vynnes in a deed of A.D. 1268), but there is no reason to put any Roman settlement here, still less to make it a 'station.'
- WALTHAM (NORTH) 'Villa' or other building, near the Wheatsheaf Inn, on the Roman road : p. 306.
- WEST DEAN . . . Two 'villas' or sets of farm buildings : p. 311.
- WEST MEON . . . Building, probably 'villa' : p. 309.
- WEST TISTED . . . Coarse black urn [Winchester Museum].
- WEST WELLOW . . . I have been told that a 'Roman pavement' has been found here, but cannot confirm the statement.
- WESTWOOD . . . House : p. 312.
- WHEREWELL . . . Pottery (including Samian) and oyster-shells in churchyard [Andover Museum].
- WICK . . . (1) See Binsted, p. 305.  
UPPER, LOWER (2) In St. Mary Bourne parish : see p. 304.  
AND MIDDLE
- WINCHESTER . . . Town : p. 285.
- WINKLEBURY . . . See Basingstoke. For the name, see Baigent and Millard, *Hist. of Basingstoke*, p. 713.
- WOODCOTE . . . See Bramdean, p. 307.
- WOOLMER FOREST . . . See Blackmoor, pp. 306, 329.
- WORTING . . . Roman coins from 'Worten' alluded to by Aubrey (MS. Bodl.).

### ISLE OF WIGHT

- BARTON WOOD . . . Hoard of bronze coins, a gallon measure in a wooden box, so badly preserved as to be almost illegible : they consisted, apparently, of large bronze, and included coins of Augustus, Trajan, Pius, Lucius Verus, and the younger Faustina. Found in 1833 at Barton Wood, near Osborne [*Journal of the British Archæological Association*, xix. 307 ; *Gentleman's Magazine*, 1864 (i.) 89 ; Ernest P. Wilkins, *Geology and Antiquities of the Isle of Wight* (London, 1859), p. 58 ; Newport Museum].
- BINNEL BAY . . . See Ventnor.
- BONCHURCH . . . Urns, coins, bones of *bos longifrons* ; also earthwork, said without evidence to be Roman—mostly at the Ventnor end of Bonchurch [*Archæological Journal*, i. 68 ; Lockhart, *General History of the Isle of Wight* (supplement to Wilks, vol. iii.) p. 19].

## A HISTORY OF HAMPSHIRE

- BOWCOMBE BARN . See Clatterford, (p. 317). Cemetery on Bowcombe Down, G. Hillier, *Result of Excavations, August, 1854* (London, 1854).
- BRADING . . . 'Villa': p. 313.
- BRIXTON or BRIGH-  
STONE 'Villa' or similar building: p. 318. Also fragments of earthenware (including Samian), supposed by Mr. Kell to be traces of a pottery, but this theory may be doubtful [Wilkins, pp. 57, 58; Lockhart, pp. 18, 22; Kell, *Journal of the British Archæological Association*, xii. 141, 159; *Proceedings of the Numismatic Society*, 25 Jan., 1844; *Gentleman's Magazine*, 1863, ii. 441].
- CALBOURNE . . Tiles (? building) at New Barn Down [Wilkins, p. 59]. Others say British village.
- CARISBROOKE . . 'Villa': p. 316. About 1750 six coins were found in a field north of Carisbrooke Castle—viz., Agrippa (2 Br.), Tiberius (of 8 B.C.), Germanicus (of 17 A.D.), Antonia Minor (of 43 A.D.), Vespasian (of 76 A.D.), and Maximian (4th century). These may or may not be connected with the villa [Warner, *History of the Isle of Wight* (Southampton, 1795), p. 12].
- CENTURION'S COPSE Traces of a building (p. 316) noticed 1840.
- CHILLERTON STREET Alleged silver coin of Alexander the Great [Kell, *Journal of the British Archæological Association*, xxii. 358].<sup>1</sup>
- CLATTERFORD . . Building: p. 317.
- CLIFF . . . See Shanklin.
- COMBLY . . . 'Villa' or farm buildings: p. 316.
- FARRINGFORD . . Two hundred and fifty 'third brass' of Gallienus, Salonina (one), the Tetrici, Victorinus, Postumus (one), Claudius Gothicus (many), found in an urn in 1863; a few are said to be 'copper silvered over' [*Journal of the British Archæological Association*, xix. 307; Lockhart, p. 23].
- GURNARD BAY . 'Villa': p. 317.  
(GURNET)
- HAVEN STREET . Small hoard of third brass of fourth century, especially Theodosius, Arcadius, and Honorius, found in making the railway from Ryde to Newport.
- HYDE . . . See Shanklin.
- MORTON . . . See Brading (p. 313).
- NEWPORT . . . Possibly village or house: see p. 317. Pre-Roman Greek coins are said to have been found here [Kell, *Journal of the British Archæological Association*, xxii. 358].<sup>1</sup>
- QUARR ABBEY . . Alleged Roman brickwork, probably a mistake [*Hants Field Club*, ii. 178].
- ROCK . . . See Brixton.
- RYDE . . . Fragments of pottery at Elmfield [Lockhart, p. 23; Ryde Museum].
- RUE STREET . . Alleged Roman road. There is, however, no proof that the road is Roman, or indeed an old one: the word 'street' is common in Isle of Wight place names, with no special significance. No actual traces of any Roman road or causeway has yet been found in the island [H. Boucher James, *Letters*, ii. 116]. See p. 325.
- SHALFLEET . . . One bit of Samian found at Dodpits, 2 miles south of the village [Wilkins, p. 57; Lockhart, p. 24].

---

<sup>1</sup> Mr. Kell also adduces a coin of Lysimachus found somewhere between Gurnard Bay and Carisbrooke. Similar finds of pre-Roman Greek coins have been reported from other places on the south coast, and, indeed, from many parts of England. It is difficult to estimate the significance of these reported finds. Some are certainly mistakes due to misreadings of Greek coins of the Imperial period: in some cases we may be dealing with coins lost by modern collectors (*Archæologia Oxoniensis*, p. 3); in some cases we probably have got traces of early trade. A few early Greek or Greco-Italian bronzes and earthenware vases of about B.C. 300-200 have been found in England, as at Aylesford in Kent, and Dorchester in Oxfordshire, and seem the results of trade (A. J. Evans, *Archæologia Oxoniensis*, p. 160).



## ROMANO-BRITISH HAMPSHIRE

- SHANKLIN . . . Hoard of 600 'third brass' of Valentinian, Theodosius, etc., with six denarii of Gratian, Arcadius, Honorius, found in 1833 at Hyde (or Cliff), on the inland side of Shanklin [*Proceedings of the Numismatic Society*, 25 Jan., 1844; Wilkins, p. 58; *Journal of the British Archæological Association*, xix. 307].
- SWANMORE . . . Pottery, probably British (Lockhart, p. 15), but called Roman in the *Gentleman's Magazine*, 1867 (i.), 792.
- VENTNOR . . . Six *minimi* and bronze ring, found in an urn at the south end of the Ventnor Tunnel [Wilkins, p. 58; in the Andover Museum].  
 Alleged glass factory in Ventnor Cove (Lockhart, p. 25)—unsubstantiated.  
 Kitchen midden at Gill's Cliff [*Proceedings of the Society of Antiquaries*, II. vii. 101].  
 A few coins of Victorinus, the Constantines, Valens and Gratian, at St. Lawrence [*Hants Field Club*, iv. 73].  
 Kitchen midden, pottery, coin of Constantine, at Binnel Bay, along the coast westwards [*Proceedings of the Society of Antiquaries*, II. vii. 326].
- WROXALL . . . Hoard of about 5,000 'third brass' found in an urn, surrounded by a rude stone wall, five feet below ground, during the construction of the Ryde and Ventnor railway in 1863. The spot is about 2 miles west of that where the Shanklin hoard was found. The *Gentleman's Magazine* gives the following list of a part of the hoard: 1 Gallienus, 1 Claudius, 3 Tetricus I., 1 Crispus, 9 Constantius II., 3 Constantinus II., 1 Helena, 8 Valens, 6 Valentinian, 2 Gratian, 3 Theodosius, and over 200 Arcadius and Honorius [*Gentleman's Magazine*, 1864 (i.) 88; *Numismatic Chronicle*, 1863, 268; Lockhart, p. 25].

### NOTE ON COLD HARBOUR

It may be noticed that I have nowhere in the preceding pages quoted Cold Harbour as the name of any Roman site or as indicative of Roman occupation. As the name is usually held to be connected with Roman remains, I may be allowed to explain my neglect of it. The truth is that the connection of the name with things Roman has yet to be proved. Cold Harbour occurs occasionally on the lines of Roman roads, and occasionally, though less often, at places where Roman remains have actually been found. But many of the cases in which it is employed have no connection with Roman remains or Roman roads. In detailing the Roman remains of Hampshire I have only been able to quote two Cold Harbours, that on the Roman road from Silchester to Staines, and that near Buckholt, on the road from Winchester to Salisbury. There are plenty of other examples of the name in the county. There is a Cold Harbour about a mile west of Eggbury, and north of the Portway, which Mr. Stevens and others quote as showing a Roman site; there is another at Priors Dean, which the latest historian of the locality, Mr. Thomas Hervey, cites as indicating Roman occupation; and there are many others. But Roman remains do not appear to have been actually found *at* any one of them, though they may have occurred somewhere in the neighbourhood. Excavation may of course alter this state of things. So far, however, as we know at present, the name has no proved connection with Roman remains.

# THE ROMANO-BRITISH TOWN OF *CALLEVA ATREBATUM* AT SILCHESTER

The site of the Romano-British town at Silchester, which has been identified with the *Calleva* or *Calleva Atrebatum* of the Antonine Itineraries, is about ten miles from Reading and nearly as many from Basingstoke, and lies just within the northern boundary of Hampshire.

It comprises 100 acres, chiefly of arable and pasture land, enclosed by the remains of the Roman wall.

With the exception of the old manor house, now a farmhouse, with its outbuildings, and the ancient parish church of Silchester, all situated close to the east gate, there are no buildings within the wall. The present village of Silchester lies half a mile away to the west.

The existing state of things has prevailed for a long time, as may be seen from the oldest account of the site, that written by John Leland in the reign of Henry VIII. :

The Toune self of *Silchester* withyn the Shire of *Hampton*, and yn the very Egge of it, as dividith the Brooke, is a vi. Miles or more from *Radinge*, and conteynith 3. Feeldes, beside the Grounde about the Manor Place self and the Chirche : so that the hole withyn the Waulle conteynith a 80. Acres. There is one straung thing seen ther that in certen Partes of the Ground withyn the Waulles the Corne is mervelous faire to the Yee, and ready to shew Perfecture it decayith.<sup>1</sup>

Stowe's Transcript of Leland gives a slightly different version :

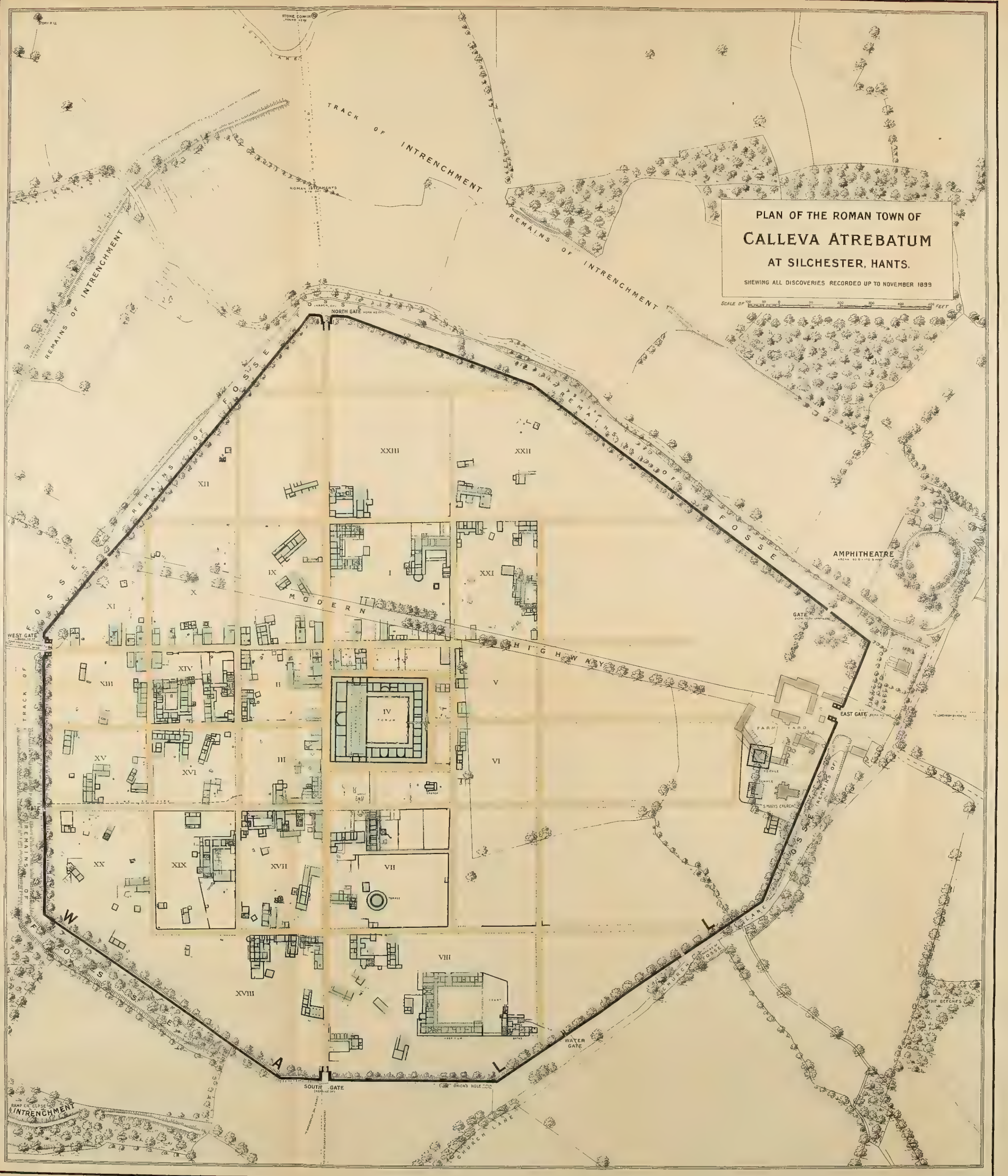
*Silchester* with a Wall of Stone about 2. Miles Compas with 4. Gates. On that Wall grow some Okes of 10. Cart Loade the Pece. The Ground within the Wall is allmoste levile with the same Wall, which Wall without is in some Place 6. or 7. Fote highe. Within the Wall is one Farme Howse, and a Pariche Church, the Houses whereof stand without the Wall.<sup>1</sup>

The first account of Silchester as a Roman site seems to be that given by William Camden, whose description of the remains was first published in Latin in 1586, but translated in 1695 as follows :

Nothing now remains but the walls, which (though they have lost their coping and battlements) seem to have been of a great height. For by the rubbish and ruins the earth is grown so high, that I could scarce thrust my self through a passage which they call *Onion's hole*, tho' I stoop'd very low. The walls however remain in a great measure entire, only some few gaps there are in those places, where the gates have

<sup>1</sup> *The Itinerary of John Leland the Antiquary*, edited by Thomas Hearne, M.A. (Oxford, 1744), vi. 48, 49.





PLAN OF THE ROMAN TOWN OF  
**CALLEVA ATREBATUM**  
AT SILCHESTER, HANTS.

SHOWING ALL DISCOVERIES RECORDED UP TO NOVEMBER 1899

SCALE OF 0 100 200 300 400 500 FEET





## SILCHESTER

been ; and out of these very walls there grow Oaks of such a vast bigness, incorporated as it were with the stones, and their roots and boughs spreading so far round, that they even raise an admiration in all that behold them. In compass, the walls contain about two Italian miles ; so that perhaps from the largeness of the place, the Saxons call'd it *Selcester*, that is, a *great city*. . . . On the west side of the walls, where 'tis a level, there runs a long ridge, cast up for defence of the place. It includes about 80 acres of land, a good and fat soil, now divided into separate fields ; with a little grove towards the west, and eastward near the gate a farm-house, with a small Church of modern building. . . . The inhabitants of this place told me, it had been a constant observation of theirs, that tho' the soil here be fat and fertile, yet in a sort of baulks that cross one another, the corn never grows so thick as in the other parts of the field ; and along these they imagine the streets of the old city to have run. Here are commonly dug up British tiles, and great plenty of Roman Coins, which they call *Onion-pennies*, from one *Onion* whom they foolishly fancy to have been a Giant, and an inhabitant of this city. There are often found too some inscriptions, which the ignorance of the Country-people has robb'd the world of.<sup>1</sup>

The site early attracted the attention of antiquaries, but their many notices of it during the last century are for the most part limited to speculations as to its Roman name or the directions of the roads passing through it, or to a description of antiquities found there.

From a paper on 'A Description of the town of Silchester in its present state,' read before the Royal Society by Mr. John Ward in 1748, it appears that a certain amount of desultory excavation had lately been carried out by a Mr. John Stair of Aldermaston, who had also constructed a plan of the town showing the lines of streets, etc. Mr. Ward explains that

The method taken by Mr. *Stair*, in order to discover where the streets formerly lay, was by observing for several years before harvest those places, in which the corn was stunted, and did not flourish as in other parts. These were very easily distinguished in a dry summer, and run in strait lines crossing one another, as they are drawn in the plan. Moreover, by spitting the ground, and often digging it up, he found a great deal of rubbish, with the plain ruins and foundations of houses on each side of these tracts. Whereas in the middle of the squares nothing of that nature

<sup>1</sup> *Camden's Britannia, Newly Translated into English : with large Additions and Improvements. Publish'd by Edmund Gibson, of Queens-College in Oxford* (London, 1695), 126. Camden's Latin text of 1586 is as follows : 'Nihil iam superest præter mœnia, quæ pinnis, & loricis nudata, magnæ altitudinis fuisse videntur. Ita enim ex ruderibus accreuit terra vt per angiportum, quem *Onions hole* vocant, vix me prono corpore transmitterem. Mœnia hæc quodammodo integra permanent, nisi quatuor omnino locis perrupta, vbi portæ fuerint, & ex ipsis mœnibus enatæ sunt tantæ magnitudinis quercus, & quasi saxis congenitæ, tam vasto radicum complexu, & tam diffusa ramorum sparsione, vt intuentibus vel admirationem commoueant. Ambitu colligunt duo plûs minûs Italica milliaria, vnde ex magnitudine *Selcester* Saxones forsitan dixerunt, quasi vrbem magnam. . . . [Præiacetque mænibus ad occasum quâ iacet planities, longo tractu agger in munimen eductus, *added in the edition of 1600.*] Includit lxxx quasi terre iugera, quæ subactum & purum solum in tria arua sunt diuisa, cum nemusculo ad occasum, ad ortum verò iuxta portam, prædium & Ecclesiola est recentior. . . . Hoc diuturna obseruatione esse exploratum, retulêrunt mihi incolæ, etsi solum satis fertile, & fæcundum sit, quibusdam tamen locis quasi areolis, quæ se intersecant, non perinde lætè fruges provenire, sed multò quam alibi rarius : per quas, vrbis olim plateas duxisse opinantur illi. Eruuntur hic quotidie lateres, quos Britannicos vocamus, & Romanorum numismatum vis ingens, *Onions penies* appellant, id est, Onioni denarij, quem Gigantem fuisse, & hanc vrbem incoluisse somniant. Inscriptiones etiam sæpiùs effodiuntur, quas tamen nobis inuidet rusticorum imperitia.' William Camden, *Britannia* (London, 1586), 134, 135.

## A HISTORY OF HAMPSHIRE

appeared, and the corn usually flourished very well. The ploughmen also confirmed the same, who found the earth harder, and more difficult to be turned up, in these tracts and near them, than elsewhere.<sup>1</sup>

Mr. Stair appears also to have uncovered parts of the *forum* and *basilica*, and to have found, amongst other things, a moulded bronze frame, 33 inches square.<sup>2</sup>

No further excavations seem to have been made until 1833, when what is believed to have been part of a system of baths was uncovered.<sup>3</sup>

In 1864 researches on a more extensive scale were begun, at the expense of the then Duke of Wellington, the owner of the site, by the late Rev. J. G. Joyce, rector of Strathfieldsaye. These excavations were carried on slowly until Mr. Joyce's death in 1878, by which time there had been laid open the foundations of two large and two small houses, and part of another, of a polygonal temple, of the *forum* and *basilica*, and of a very large building with baths attached, near the south gate, perhaps a *hospitium* or inn. Mr. Joyce also uncovered the remains of the east gate, and partly examined the north and south gates.<sup>4</sup> The work was continued for a few more years by the Rev. H. G. Monro, the Rev. C. Langshaw, and Mr. F. G. Hilton Price, during which several excavations begun by Mr. Joyce were completed, but in 1884 all digging was suspended.<sup>5</sup>

These investigations, so far as they had gone, had been by far the most important hitherto made for the elucidation of the Roman period in this country, but they had not been conducted on any settled plan, or with any other idea than the exploration of detached buildings. The general character of the town, and the relation of one part to another, still remained obscure.

In 1890, with the cordial co-operation of the present Duke of Wellington, the Silchester Excavation Fund was established, under the auspices of the Society of Antiquaries, for the carrying out of a systematic excavation of the whole area within the Roman wall.<sup>6</sup> Under the scheme of operations adopted, each of the squares or *insulae* into which the area of the town is divided by the Roman roadways was to be thoroughly examined by trenching, and all foundations of buildings carefully explored. After being properly planned, etc., the foundations were again to be covered up, and the land restored to cultivation.

During the ten years that have now elapsed since operations were begun by the Fund in May, 1890, the work of excavation has been carried on year by year, during the summer months, under the direction and supervision of one or other of an executive committee of experts.

<sup>1</sup> *Philosophical Transactions*, xlv. 607.

<sup>2</sup> *Ibid.* 608, 609.

<sup>3</sup> *The Gentleman's Magazine*, ciii. (1833) 122-125; and *Archæologia*, xxvii. 414-419.

<sup>4</sup> See *Archæologia*, xl. 403-416, and xlv. 329-343, 344-365, for detailed accounts of Mr. Joyce's discoveries.

<sup>5</sup> *Archæologia*, l. 263-280.

<sup>6</sup> See a paper 'On the desirability of the complete and systematic excavation of the site of Silchester,' by G. E. Fox and W. H. St. John Hope, in *Proceedings of the Society of Antiquaries of London*, 2nd S. xiii. 85-97.



## SILCHESTER

Twenty complete *insulæ* (two of double size), and portions of five others, have thus been systematically explored. Besides buildings within certain of them that were uncovered by Mr. Joyce and his successors, there have now been brought to light about forty more complete houses and parts of six others, and a considerable number of smaller structures of indeterminate character ; also a private bathing establishment, two square temples, the remains of the west gate, a Christian church, and a group of buildings, etc. in the north-west quarter of the town, which seem to have belonged to an extensive series of dye-works. The *basilica* and *forum* and the north and south gates have also been re-examined ; and further exploration of the baths attached to the *hospitium* near the south gate has led to the discovery of a singular series of drains and a small water-gate in the town wall. Another subordinate gate has also been found on the west side of the town.

It must, of course, be understood that, as in the case of the remains of most Roman buildings in this country, very little else is left at Silchester than the foundations.

The respective *insulæ* have been numbered for reference in the order in which they were excavated, and are so laid down on the accompanying plan, which shows all foundations uncovered down to the end of 1899.

The first fact noticeable on looking at a plan of the town is its peculiar form, which is that of an irregular nonagon, with its longest side towards the north-east. This irregularity, so unlike the rectangular plans of *Glevum* (Gloucester), *Camulodunum* (Colchester), or *Lindum* (Lincoln), it shares with the still larger towns of *Uriconium* (Wroxeter) and *Verulamium* (St. Albans), and probably with some other exceptions to the general rule. This leads to the supposition that the Roman surveyors laid out the lines of *Calleva* within the mounds of a Celtic *oppidum* which they found on this spot, perhaps the chief stronghold of the Atrebates. This idea receives confirmation from the fact that a mound, with a ditch on its outer face, remains at no great distance from the town wall on the north, the west, and partly on the south side.

The Celtic earthwork occupied the eastern end of a tongue of ground which here projects from the high land to the west and north. The site was a commanding one, gently sloping southwards, and possessing the double qualification of a wide outlook and of a position easy of defence and difficult of attack.

Within the site thus described there is reason to believe that a settlement gradually grew up early in the Roman occupation about the ancient Celtic roads which here intersected. This settlement must soon have become an important one, and at an early period, perhaps during the second half of the second century, the *forum*, with the adjoining *basilica*, began to be built in the centre of the town at the intersection of the roads that traversed it from east to west and north to south.

The next work undertaken was the building of the town wall and the laying out of the streets. Down to this period the houses would

## A HISTORY OF HAMPSHIRE

appear to have been irregularly dispersed round the centre of the town within the lines of the Celtic encampment. But the area of this was evidently deemed too large for the requirements of the growing town, and when it was decided to fortify it by a wall a new line for this was drawn within the older earthwork.<sup>1</sup> Towards the south-east a considerable length of this appears to have been followed in the new defences, but elsewhere the line ran parallel to the older work at such a distance from it as to render the latter useless in case of attack.

The wall thus built was  $9\frac{1}{2}$  feet thick at the base, lessening by sets off within to  $7\frac{1}{2}$  feet towards the top. In height it could not have been less than 20 feet. It resembles in construction the walls of many other Roman towns and forts, being composed of a rubbly concrete, but with the exception that the usual tile courses are here supplied by lines of flat stones. The intervals between these were, on the exterior, faced with dressed flints, and at the base of the wall was a chamfered stone plinth.

At intervals of about 200 feet along the whole course of the wall are what look like internal buttresses. These are formed by carrying

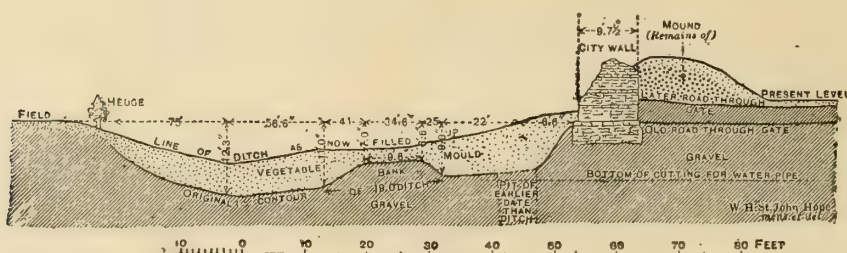


FIG. 1. SECTION OF THE CITY DITCH BY THE LESSER WEST GATE AT SILCHESTER.

up the full thickness of the masonry,  $9\frac{1}{2}$  feet, from the bottom. The breadth of these buttresses is usually 12 feet. It is conjectured that they formed the bases of mural turrets, giving a command of the rampart and a wider outlook than could be obtained from the battlements.<sup>2</sup>

The wall throughout its length is now considerably reduced in height, and otherwise much ruined. The plinth and the lowest courses are everywhere buried owing to the accumulation of earth and rubbish, and the facing above them has been systematically despoiled for a long period for building material or road metal.

The flat space called a berm, which was left at the foot of many Roman walls, is absent at *Calleva*, and the scarp of the ditch begins from the plinth of the wall. The ditch can still be traced round most of the circumference of the town, but it has become filled up to a considerable extent. A section cut across it in 1896, at a small gateway then discovered on the western side, showed that the width was about 80

<sup>1</sup> Even this smaller area seems to have been quite large enough, as shown by the absence of buildings near the town wall.

<sup>2</sup> Towers of small proportions, internal to the walls, and without external projection, arranged in a somewhat similar manner, occur in the stations of the Northumbrian wall, and towers internal to the wall are known to have existed in the Roman fortifications of York.



## SILCHESTER

feet, and the greatest depth, which was towards the outer margin, a little over 12 feet.

The wall is lined by a mound on its inner side. From cuttings that have been made in it on the south and west, and more recently on the north, this mound would appear to be wholly composed of earth. From similar cuttings made to ascertain the contour of the ditch in the same directions, this seems to have been excavated in the gravel which underlies the site to some depth (see section). It would therefore look as if the material from the ditch was used for some other purpose than the formation of the mound. If we may conjecture that the laying out of the town and the making of the wall and ditch were proceeding at the same time, the gravel from the ditch may have been used in forming the roadways. In that case some of the earth composing the mound may have been first cleared from the lines of these roadways.

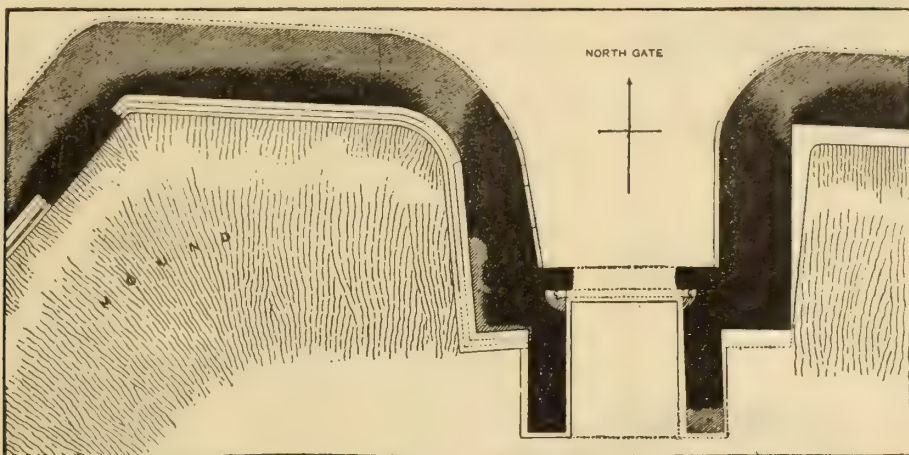


FIG. 2. PLAN OF THE NORTH GATE AND ADJOINING SECTION OF WALL.  
(For scale, see plan of West Gate.)

The town wall was pierced by four principal gates, on the north, east, south, and west, and by at least two subordinate gates. One of these was near the eastern angle of the town, and evidently gave access to an amphitheatre, which was distant from it about 300 feet.<sup>1</sup> The other was about 500 feet south of the principal west gate, and was perhaps that by which the road from Old Sarum entered the town.

Both the north and the south gates were single, and alike in design and of nearly equal dimensions. In both the town wall returned inwards the whole thickness of the mound, thus setting back the actual gateway in a kind of passage from 24 to 28 feet deep. This return of the wall, backed as it was by the mound, afforded good flanking defence to the gate, and gave space for platforms of sufficient dimensions for placing

<sup>1</sup> The amphitheatre is a small oval earthwork lying on the north-east of the town. The area measures about 150 by 120 feet. The mound is now much overgrown with trees and bushes.

The cemeteries of course also lay outside the town beyond the gates. The largest was probably that on the north.

## A HISTORY OF HAMPSHIRE

*ballistæ* of considerable size to command the approaches. The actual gateway lay at the end of the open passage way, and consisted of two parallel walls 12 feet apart and 17 feet long, with a semi-circular arch at each end. The entrance was closed by double doors hung on pivots, which, below, turned in a wooden sill embedded in the roadway of the gate. No guard chambers were found at either gate.

Both recent and former discoveries showed that the eastern and western gates were also alike in design, though differing considerably from the north and south gates.

The road crossing the town from east to west was evidently of more importance than that from north to south, a greater amount of traffic passed along it, and in consequence the gates upon it were of larger dimensions. Each was double, consisting of two arches of the same span, 12 feet, side by side, with a dividing wall to receive the wooden roofs of the gate passages, the width of which nearly coincided with those of the north and south gates. On each side was a guard chamber and lock-up. In the excavation of the west gate the same arrangement was found for a wooden sill as in the north and south gates, but with the addition of a cavity piercing the dividing wall behind the doorways, evidently a provision for the withdrawal of the sills when decayed in order to replace them with sound ones. The iron pivot of the half of one pair of doors, with the iron strap for fixing above it to strengthen the woodwork, was also turned up in the rubbish, thus showing the method of hanging the doors, and the thickness,

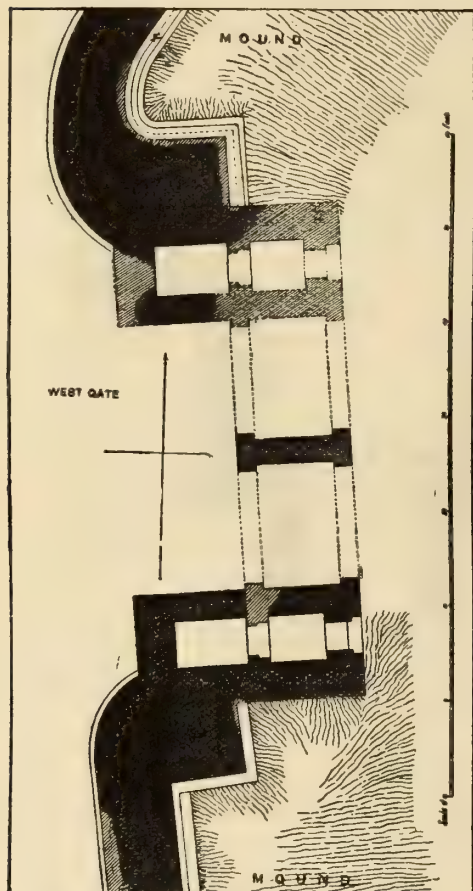


FIG. 3. PLAN OF THE WEST GATE.

4 inches, of the valves. The double gates were not set back as deeply from the line of the wall as the north and south gates. The curve inwards of the wall was but slight, and although the projection of the guard chamber on each side of the double-arched opening probably formed towers affording a certain amount of flanking defence, as a military work these gateways were of no great strength.

The passage across the ditch at all the entrances was either by a causeway or by a wooden bridge.

The subordinate gates differed from the principal entrances, inasmuch as they were simply archways, about 12 feet wide, flush with the wall, and furnished with double doors. The section across the ditch (see



## SILCHESTER

Fig. 1) which was made in front of the western gate in 1896 showed that a narrow bank had been left parallel with the wall, as if to carry a wooden bridge over the ditch. It has yet to be ascertained whether a like feature existed before the other gates. At some late period in the history of the town extensive alterations were made to the gate just noticed. In the first place the roadway inside it was raised between 4 and 5 feet, with a corresponding ascent to it from within the town. Upon this had been built, against the north jamb only, a mass of masonry, of somewhat poor construction, which extended through the wall and reduced the gateway to a width of 7 feet.

Before passing from the subject of the mural defence and its gates, it may be pointed out that a length of nearly two miles of this huge turreted wall was required to protect the town, and it gives a high idea of the energy and wealth of the inhabitants that they should have been able to carry through such a work, when we consider the difficulty of carriage of the mass of material required for it, and the time which must have been occupied in its construction.

The space enclosed by the ring of wall lies bare and open ; a wide extent of arable land, with few hedges and fewer trees, traversed from east to west by a modern occupation road. This enters the farmyard near the east gate, passes across the open fields to the western wall, where, turning southward within the wall, it makes its exit from the town by the west gate.

The land is generally level, especially in the northern half of the site, and there is a broad flat ridge running from the north to the south gate. But on the east side of this ridge a valley extends from near the centre of the town in a south-easterly direction, and the ground also falls away somewhat in the south-western quarter.

It is impossible now to discover what were the beginnings of the Roman town, or when the surveyors laid out the site within the Celtic intrenchment. One fact seems to show that this laying out took place at a comparatively early date in the Roman occupation of the country ; viz. that, so far, no foundations have been met with beneath the streets or roads, and that all the buildings lie either within or along the edges of the square plots into which the site is divided. The reverse would certainly have been the case had any great rectification in the plan of the town been made, supposing that it had grown up irregularly.

There are, nevertheless, certain indications in the direction of the lines of the streets from east to west, and the irregular size of the rectangular areas into which the town is divided, which suggest that the setting out must have taken place not only after many houses had been built but subsequent to the erection of the *forum* and *basilica*. This group of buildings, although itself rectangular, is canted so as to make a small angle with the surrounding roads, and several of the large houses to the north were evidently built at first with a similar deflection. It will also be seen from the plan that other of the houses abutted upon the streets so awkwardly as to suggest a mutilation and rebuilding of

## A HISTORY OF HAMPSHIRE

their gable ends when the final laying out of the roadways took place.

It is probable that when the Roman surveyors laid out the town within the Celtic enclosure, the existing lines of roadway joining the original entrances were taken by them as guiding lines for setting out the area. The direct line, however, between the Celtic east and west entrances was apparently corrected from its sloping course across the camp to make it fit with the rectangular divisions of the Roman surveyors. It will be seen that these lines divided the site into unequal quarters; the line joining the north and south gates being considerably to the west, and the line passing from east to west being much to the north of the true centre of the area.

The plan shows that there were within the wall seven parallel roadways running from north to south, and six at right angles to them from east to west. The whole site was thus cut up into a number of blocks, or *insulae*, somewhat varying in size, in and around which the houses continued to be built. The largest and most central block, that which lay west and south of the intersection of the main roads, was occupied for the most part by the principal public buildings of the town, the *forum* and the *basilica*.

The roadways seem to have consisted of a bed of hard gravel, having a pitching of flints in the centre, forming a gutter. There do not appear to have been any drains or sewers under the roadways, except in the main street leading out of the *forum*, the rainfall having been carried off in the simple manner described. There are not any signs of drainage from the houses.

The width of the streets varies; the broadest yet found was  $28\frac{1}{2}$  feet across.

The streets were bounded by the fronts of the houses and other buildings, which here and there were connected by lengths of walling; while in several instances the rest of the *insula* was also enclosed by walls. The aspect of the streets must therefore have been somewhat monotonous, though gables and lines of roofing, and here and there a shop, or the doorway of some large mansion, would break the line of dead walling. Perhaps in places wooden palings replaced this walling, affording a glimpse into the gardens and yards attached to the various buildings.

Between and behind the houses at Silchester was a considerable amount of open ground, used for all the variety of purposes that may be observed in any country town of the present day. These open areas were literally riddled with numerous rubbish pits, into which was thrown all such refuse as to-day finds way into the ashpit or dustbin. Some of these pits were used as latrines by the inhabitants of the neighbouring houses.

Within the open spaces, too, were the wells, which so far seem to have been the main source of water supply. These wells varied in depth, according to their position inside the town, and were sunk through the



## SILCHESTER

gravel into the sandy water-bearing stratum underlying it, which in turn rests on clay. To prevent the sand from collapsing, the plan was first tried of setting a vertical row of stakes and wattling round the bottom of the well; but for this system the better one was afterwards adopted of substituting a barrel from which the ends had been removed, or a square framework of timber formed of rows of boarding dovetailed at the corners. The height of this framework varied according to the thickness of the sand, and, for the same reason, two barrels were sometimes used instead of one. Some of the wells were steined with flint rubble throughout, but more often the gravel was allowed to stand alone.

The arrangement of the buildings within the *insulæ* varies widely. Sometimes they are placed at the corners, and sometimes along one or more of the sides, while again they may be found scattered over the *insula* or disposed in quite an irregular manner. Many indications of rebuilding have been met with, in the lines of various foundations of earlier date, usually at lower levels, and often at slightly different angles from the direction of the roadways. These lower foundations are almost always thinner than, and of at least as good construction as, those overlying them.

After the general view of the site just given, the various buildings, public and private, making up the town have next to be described. As those of a public character, in the present case, scarcely require so full a description as those of a private kind, the domestic buildings being generally more interesting and varied, the public edifices may be taken first.

Among these which are markedly characteristic of a Roman town, the baths take the first place. At Silchester they are indifferently represented by an establishment in *Insula VIII.*, not far from the south gate of the town, and are connected with a large edifice by a covered passage or peristyle, this latter being possibly an *hospitium* or public inn. There seems a probability, though it has not been ascertained for certain, that the original bathing establishment of the town was situated close to the *basilica* in *Insula III.*, a long conduit<sup>1</sup> having been found leading from without the small west gate to a mass of ruined foundations in that *insula*. If the public baths were ever situated in *Insula III.*, they certainly became disused and destroyed and built over in the course of time, and an inferior establishment, the one just mentioned, was substituted. Inferior as this establishment is for a place of the size of *Calleva*, it follows in its divisions the usual requirements of the Roman bath, having its *apodyterium*, *frigidarium*, *caldaria*, and *sudatoria*, in approved Roman fashion; that is, its undressing-room, its cold bath, hot baths, and hot-air baths. All these may be seen in the group of constructions given on the right hand of fig. 4. From these baths the waste water used in flushing the latrines was conveyed by a drain to a sluice of some size in the south wall.

The large edifice (fig. 4) called a *hospitium*, to which these baths

<sup>1</sup> *Archæologia*, lv. 422-424, and pl. xxiii.

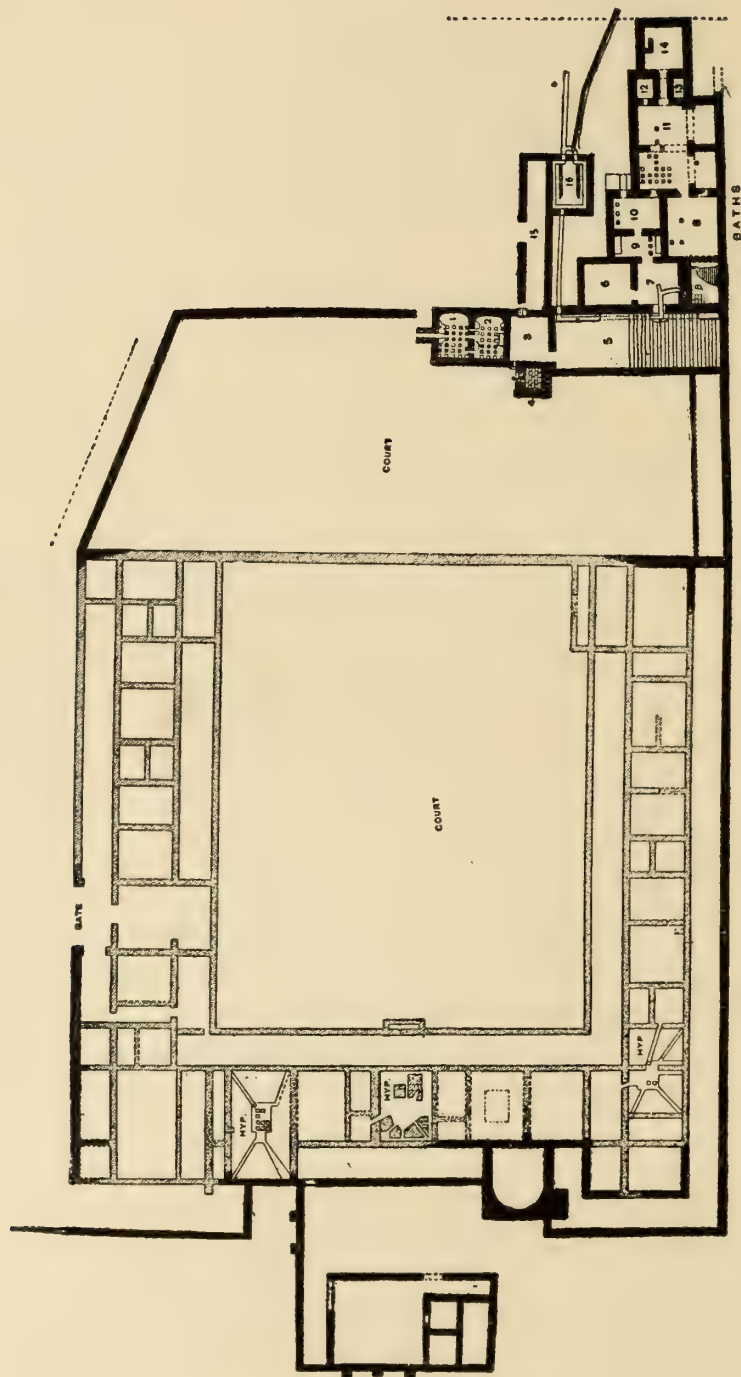


FIG 4. HOSPITIUM AND ADJOINING BATHS IN INSULA VIII.

(Scale, 60 feet to an inch.)

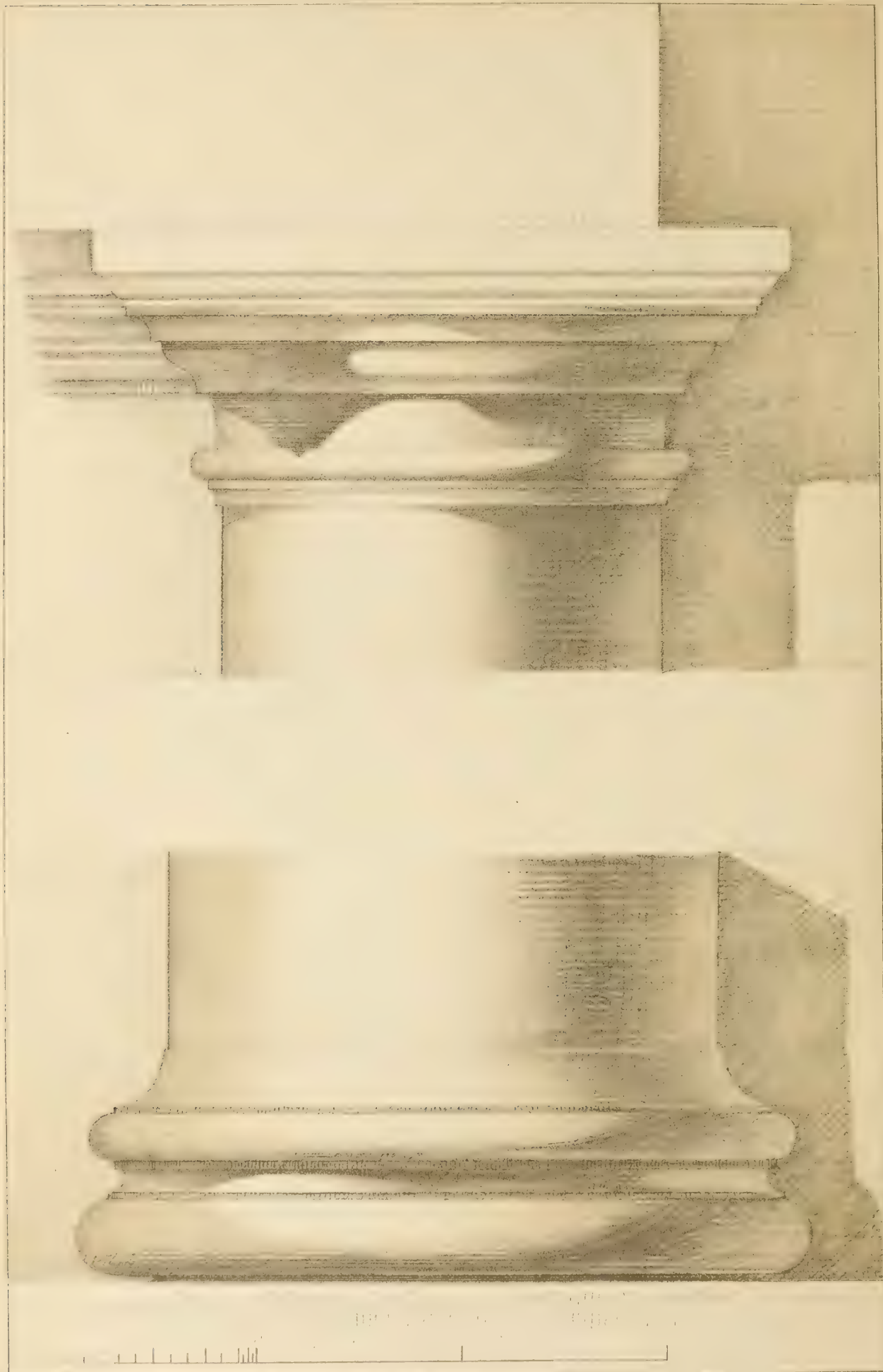




ROMANO-BRITISH REMAINS—SILCHESTER.

Restoration of Base and Capital of a Column from the Gateway of the Forum.

PLATE I.





## SILCHESTER

appear to be attached, was discovered in 1876 by the Rev. J. G. Joyce, but not fully excavated until 1893. It was built round a courtyard, and resembled a private house in its plan of a type yet to be treated of. From its size and its general likeness to buildings, not only in this country but also in Gaul and Italy, devoted to purposes of public entertainment, it may have been an inn.

Of more importance, as being the very centre of civil life and movement, is the group of buildings made up of the *forum* and *basilica*.

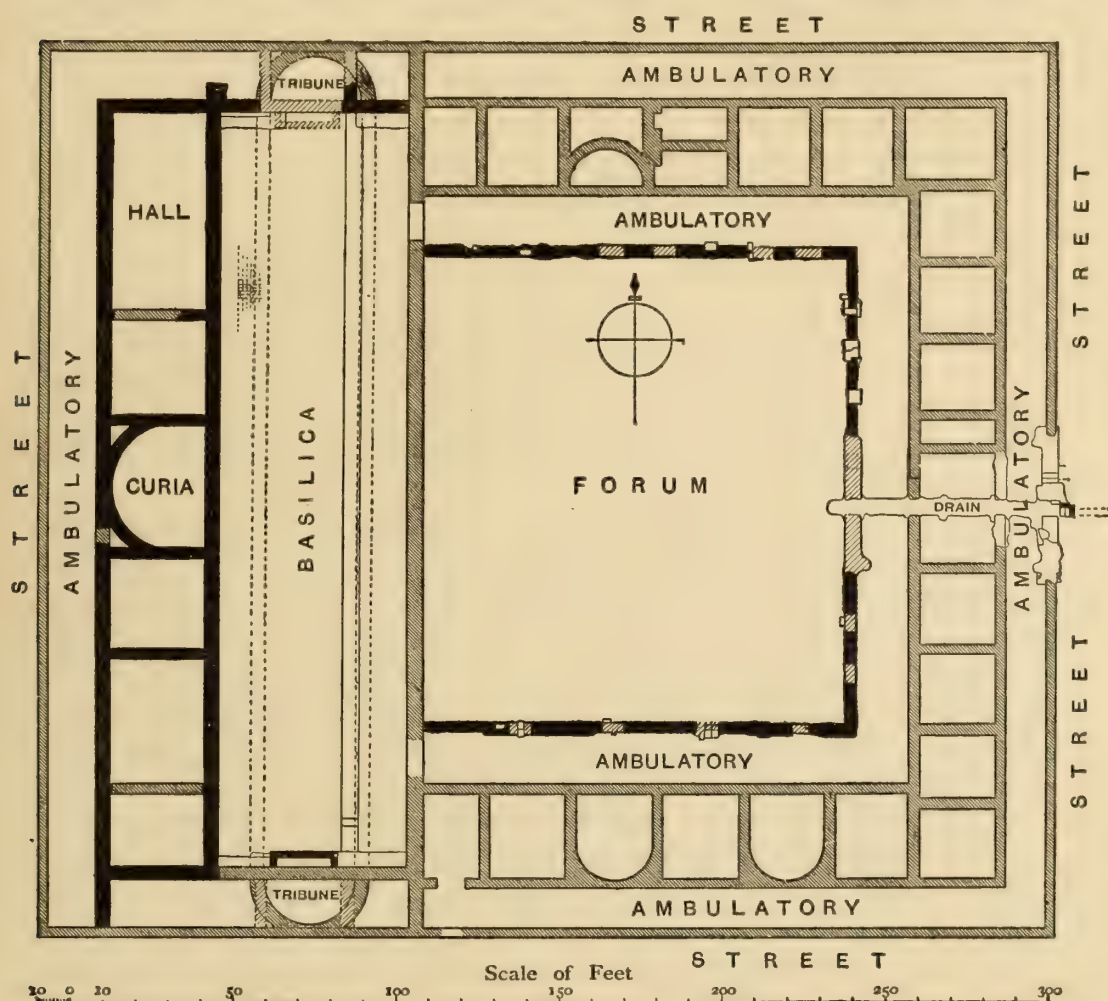


FIG. 5. THE FORUM AND BASILICA.

(The black lines show rebuilding, the shaded lines the earlier structures, and the single and dotted lines in the basilica the position of the earlier and later colonnades.)

The *forum* consisted of a great courtyard about 150 feet square, with colonnades on all sides but the west, which was formed by the eastern wall of the *basilica*. Behind these colonnades were wide ambulatories, and in rear of them were ranges of shops. On the south side, judging from the shape of the chambers, were a series of public offices instead of shops. Similar ambulatories surrounded the whole block of buildings (fig. 5). Fragments of the bases, presumably of these colonnades, have been dug up on the spot.

## A HISTORY OF HAMPSHIRE

In the centre of the east side of the *forum* are heavy foundations, those of a gateway probably of some architectural pretensions, forming its main entrance. A large base of a column was dug up not far away, and a Doric capital, the proportions of which would accord with this base, was found dragged away as far as the south gate of the town. Both, it may be conjectured, had once formed part of the gateway in question, and both, restored, are shown on Pl. I. The capital is Doric, but a variation on the usual type. It is a good example of the free-handed way in which the Romano-British architect treated the details of the orders employed in his buildings. The base illustrated is of the kind known as Attic, the other bases found in the *forum* being of the same type.

In the north ambulatory of the *forum* was a semicircular recess which may have contained a statue of some patron of the town. On either hand of it, and along the east side, foundations of walls indicate what may be taken for shops, which opened by wide fronts on both the inner and outer ambulatories. These shops had no doubt counters of masonry, in front of which grooves in the thresholds allowed an arrangement of sliding shutters for closing them at night. Above the shops may have been chambers, reached by wooden stairs within them, used either for habitation or storage of goods, or for both.<sup>1</sup>

Doorways at the west end of the north and south ambulatories gave access to the *basilica*.

This great edifice took in, in its length from north to south, the whole breadth of the *forum*, and stood on its western side. From the first excavation of the site made by the Rev. J. G. Joyce in 1870, it appeared that it had been destroyed at some period and rebuilt. In the first period it consisted of a great hall 240 feet long and 58 feet wide, divided into a central nave with narrow aisles by colonnades of the Corinthian order, and with a semicircular apse at each end, the raised floor of which formed the tribune of a court of justice. In the centre of the length of the hall was a still larger apse or apsidal chamber, raised three steps above the body of the hall. It was probably the council chamber of the governing body of the city. On either hand of this central apse were other rooms or halls (see fig. 5).

At some period, possibly a late one, this building, with its annexes, appears to have been burnt down, and subsequently re-erected in a somewhat different fashion. The body was divided into a wide nave, with one aisle only to the east of it, and the apse at each end was changed into a rectangular recess. The central apse was rebuilt on the same plan as before the fire, together with the chambers on each side of it.

In its first state the *basilica* must have been an imposing building. The columns of its colonnades, judging from the diameter of the drums found on the site, could scarcely have been less than 27 feet high. Above these came the entablature, and then, without doubt, a space of wall high enough to contain a row of windows, a clerestory in fact,

<sup>1</sup> See *Archæologia*, liii. 547.





ROMANO-BRITISH REMAINS—SILCHESTER.

Restoration of one of the original Capitals from the Colonnades of the Basilica.

PLATE II.





## SILCHESTER

for without this feature the edifice could not have been lighted, owing to the height and close proximity of adjacent buildings. From floor to ceiling it may have had a height of 60 feet. The apses would be covered with semi-domes, and possibly lined, in the lower part at least, with slabs of marble. Fragments of marble, resembling that known at the present day as Campan Vert, quarried in the Pyrenees, have been found scattered about the neighbourhood of the building, and they may be the scanty remains of these wall linings. The fronts of the tribunes were certainly faced with Purbeck marble slabs, portions of which were discovered in place during the excavations of 1870. Pieces of white marble have also been dug up within the walls.

With respect to the pavements of the *basilica* little can be said. The southern apse in its early state had a floor of fine white stone *tesserae*; the northern and central apses were floored with tile mosaic, but these, with a small patch remaining in the body of the building, of plain tile, evidently belonged to the time of the barbarous rebuilding. Not only was marble used as a means of decoration, but the walls were stuccoed and coloured. Painted plaster of a fine blue colour was dug up in the central apse, and elsewhere many other specimens showed grounds of white, ochreous yellow, and a pale red.

The first building was probably erected during the second half of the second century, if any opinion can be formed from the character of the fragments of the capitals from its colonnades. Though wanting in the development of the volutes, the leafage of these Corinthian capitals is of excellent workmanship and full of vigour, showing no signs of decline in art. A restoration of one is given on Pl. II. On the reconstruction of the *basilica* after the fire, much material was no doubt used again, including such of the older capitals as were uninjured; but the number did not suffice, as is proved by the finding of part of one rude specimen, a coarse and clumsy imitation of the older work. This served as a horse-block for years in the farmyard at Silchester.

Before leaving the *basilica*, the record of one discovery cannot be omitted. During the excavations of 1870, just in front of the steps ascending to the central apse, part of a head carved in stone, and larger than life, was discovered. It was that of a female figure wearing a mural crown. In later excavations fragments of drapery were dug up, evidently belonging to the statue of which the head had formed part. These fragments may be the relics of a statue of the guardian genius of *Calleva*, placed appropriately at the entrance to the council chamber of the city.

The temples discovered at Silchester are of interest as adding to the scanty list of edifices dedicated to pagan divinities in this country. They are three in number, the largest being polygonal in plan. This last was examined by Mr. Joyce about the year 1873. It appears to have consisted of a *cella* or chamber, 35½ feet in diameter, with an encircling ring of sixteen columns forming a peristyle. From the thickness of the foundation for these columns, their dimensions were probably about the same

## A HISTORY OF HAMPSHIRE

as those in the *forum*. Probably also the polygonal form of the edifice was adopted by the builders to avoid the difficulty of working a curved entablature over the columns, which would have been encountered if the temple had been circular. No detail is known of the building, except a fragment of plain white stone tessellation from its floor. Only its foundations now remain. The total diameter was about 65 feet.

The other two temples have a fuller record. Their remains were uncovered in 1890. They lie partly under the churchyard of the parish church, partly under the farm buildings, near the eastern gate of the town. Both stood within a large courtyard. The northernmost of the two was the larger. The foundations showed that it had consisted of a chamber or *cella* 42 feet square, standing centrally upon a still larger platform about 8 feet high. It may be presumed that this *cella* had been surrounded by a peristyle after the same fashion as the polygonal temple. No fragments of columns, however, were dug up, but they might easily have been carried away, from the nearness of the site to one of the gates. The sides of the platform on which stood the chamber had been painted a rich dark red, and the floor of the peristyle was composed of a fine cement of lime and pounded brick, called *opus signinum*. The floor of the *cella* was of the same material, but in it were included irregular portions of a dark limestone, apparently from the Purbeck beds. The whole surface had been ground down and polished. Further may be noted the discovery of pieces of fine white stucco and of Purbeck marble slabs and mouldings, relics of the internal decorations.

The second temple resembled the first in plan, but was somewhat smaller, the *cella* being only 24 feet square. It is doubtful also if it had ever had a peristyle. The position of the entrance to neither building could be found.

To whom were these temples dedicated? One deity has left the 'shadow of a name' in an inscription dug up at Silchester in the last century, in which the Hercules of a Belgic tribe figures. Could his statue have stood in one or other of these shrines? We shall never know. A hundred years before the town, by gradual decay, had faded out of existence, the temples in question may have been pulled down, and the materials used for other buildings. Perhaps the rising power of Christianity, as seen in the little church without the south-east corner of the *forum*, may have made for their destruction.

This little building is the more noteworthy from its being probably the only example of a Christian church of Roman date that has yet been found in this country.

Its ground plan, as revealed during the excavations in May, 1892, consisted of a nave and aisles standing east and west, with rudimentary transepts, a western apse, and a porch or portico across the east end. Its total length did not exceed 42 feet. The nave and porch had been paved with coarse red mosaic, but there was a panel of finer work in front of the apse, upon which had no doubt stood the altar. About 11 feet to the east of the porch was a square tile foundation, and behind it



## SILCHESTER

a little pit lined with flints. This foundation, which was 4 feet across, probably supported the laver for ceremonial ablution, the little pit serving to receive the overflow from the basin. About 20 feet west of the apse was a wood-lined well, in which were found three coins of Victorinus, and near the bottom two small pewter cups of conical form.

From a comparison of the plan and surroundings of the building with those of a similar character in Italy and other parts of the Roman Empire, there can be no doubt that it is a small church of the basilican type. And despite its small size, the complete correspondence of its parts with those of known churches of early date precludes its having been raised for any other purpose.<sup>1</sup> It is certainly not a domestic building, nor a temple of any kind, and the near proximity of the *basilica* with its tribunes, and of the various municipal offices in the *forum*, renders it unnecessary to consider how it might have been adapted for secular purposes. The character and workmanship of its mosaic pavement indi-

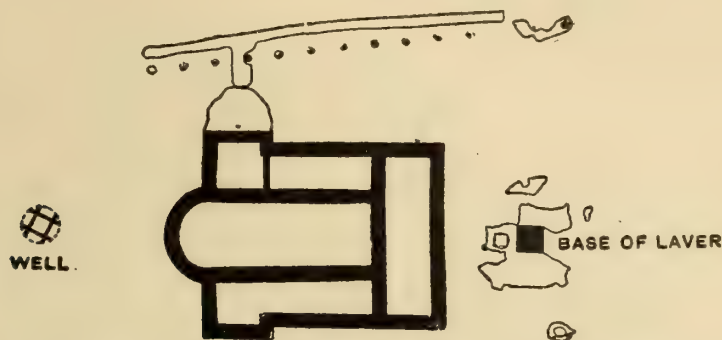


FIG. 6. PLAN OF AN EARLY CHURCH AND ITS SURROUNDINGS IN INSULA IV.  
(Scale, 30 feet to an inch.)

cate that this little church was probably erected not long after the promulgation of Constantine's Edict of Toleration in 313. For structures of an analogous character, though of a later date, we must look to the early churches of Northern Syria. The existence of several such small churches in the Numidian town of Thamugadi or Timgad<sup>2</sup> suggests the possibility of more than this one little oratory being found at Silchester.

After the public come the private buildings, which in many ways may be considered the more important section of the two from the light that a careful examination of them throws upon the mode of life of the inhabitants of the town.

The position of the houses within the *insulae* has been dealt with, but the plans of them have yet to be treated of. These plans may be said to fall into two classes: one in which a row of chambers of varying size is lined on one or both sides by corridors serving for communication; the other in which ranges of similar chambers and corridors surround or

<sup>1</sup> G. G. Scott, *An Essay on the History of English Church Architecture* (London, 1881), 52, *et seq.*

<sup>2</sup> *Bulletin de la Société des Antiquaires de Picardie*, xvii. 261-281.

## A HISTORY OF HAMPSHIRE

form three sides of a courtyard. The first named may be termed the corridor, the second, the courtyard type of house. The dwellings at Silchester all fall under these two categories, though the addition or omission of a chamber or corridor may occasionally somewhat obscure the typical plan. In fig. 7 a house of each type may be seen side by side. Fig. 8 gives a typical example of the corridor type. The plan of the *hospitium* (fig. 4) is a perfect example of the courtyard type. The walls of the houses were for the main range of buildings generally 2 feet thick, those of the corridors, having only to support a lean-to roof of no great width, being less. There can be little doubt but that many of the houses had two stories, the thickness of the walls being a fair indication that such was the case. It is also most probable that the upper story

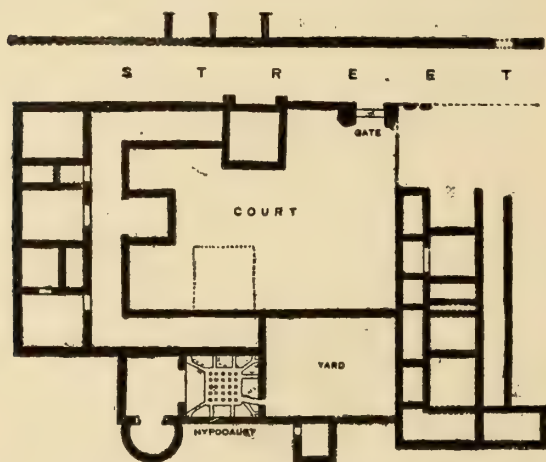


FIG. 7. PLAN OF TWO ADJACENT HOUSES IN INSULA VIII.

No. 1 of the courtyard type ; No. 2 of the corridor type.

(Scale, 60 feet to an inch.)

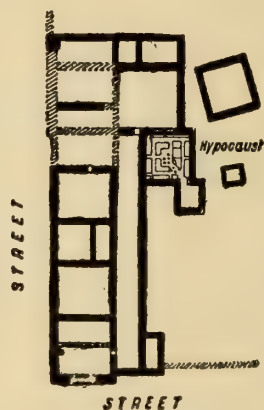


FIG. 8. PLAN OF A HOUSE OF THE CORRIDOR TYPE IN INSULA III.

(Scale, 60 feet to an inch.)

was of half-timber construction, and on this account the aspect of these habitations was not so very unlike that of mediæval buildings of similar materials. The walls were of flint rubble, generally well built, often with lacing courses and quoins of tile.

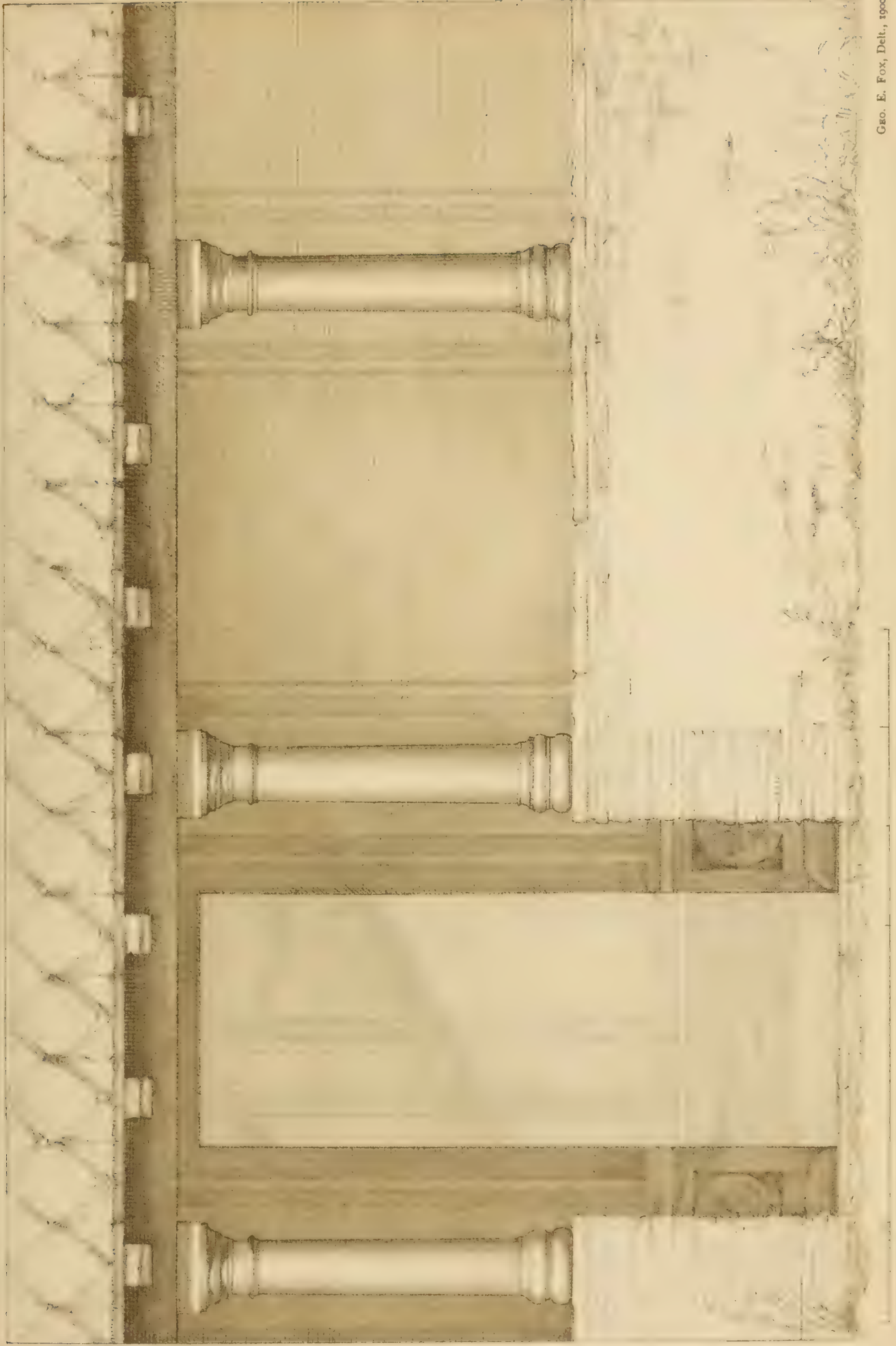
The peculiarity of the buildings, however, is the universal presence of corridors along the main range or ranges of chambers of which the dwelling was composed. It is an open question whether the external wall of these passages was carried up to the lean-to roof and pierced with windows, or whether, as a dwarf wall, it formed a base for stone columns, piers, or wooden posts to carry the pentice, and so had something of the effect of a peristyle. The few short columns found at Silchester, with various small capitals, and the examples of like columns found elsewhere which must have been used on such dwarf walls, would lead to the idea of the occasional use of this verandah-like arrangement. But considering the character of our climate, the probability is that the closed corridor was the rule, and the open one the exception. Both kinds, however, might have been found in one house of any size. Pl. III. shows a con-



ROMANO-BRITISH REMAINS—SILCHESTER.

Restoration of a part of the Pillars and Portico of a large House.

PLATE III.



The Victoria History of the Counties of England—Hampshire and the Isle of Wight.

Geo. E. Fox, Del., 1900.

*To be bound in the Roman Section.*





## SILCHESTER

jectural arrangement of a small part of one of these open corridors, the columns and other details being all restored from existing examples.

The question of the lighting of the houses is an important one, as it influences the entire construction and appearance of the buildings. With such as had only one corridor there could be no difficulty in the position occupied by the windows; but with such of the dwellings, and there was a large proportion, in which the ranges of chambers lay between two corridors, it is not so easy to say how the ground-floor rooms were lighted. Possibly the roof of the outer corridor was so modified as to allow of windows on that side arranged high up in the walls as a sort of clerestory to each chamber. It seems scarcely possible that rooms of any size could be properly lit from openings beneath the roofs of the corridors, the only other alternative, unless the Romano-Britons were content to pass a considerable part of their lives in semi-darkness, when at home. Gaily painted walls and mosaic floors were meant to be seen, and in the habitations in which they are found there must have been a sufficiency of direct light for their display. There is evidence that the windows were glazed, for window glass is found at Silchester, though in small quantities, every year. The roofs of the houses were covered either with the well-known Roman roof tiles or with hexagonal stone slabs, which when laid presented an appearance of serrated lines.<sup>1</sup> The external walls seem, at least in some instances, to have been plastered, possibly as a protection to the rough flint rubble of which they were built. The houses may have been ornamented externally with a certain amount of colour, as it is impossible to imagine Roman buildings without such an adjunct. The general aspect of the buildings was no doubt low, with whitewashed walls, and a large proportion of roof to wall, here and there the red tile roofs showing brightly against the prevailing body of grey stone coverings. Neither externally nor internally was there much architectural effect, but all that could be obtained by means of colour was lavished in the interior of the buildings. Painted plaster is constantly dug up at Silchester, and from it something may be deduced as to the favourite types of decoration. They appear for the most part to be imitations of marble wall linings, and panels of plain but full colour divided from each other by combinations of bands of contrasting colours. The marbles imitated are porphyry, cipollino, the yellow Numidian marble, and granite. Occasionally examples of painted ornament have been turned up. In one instance the design of a dado of one of the principal rooms of a considerable house in *Calleva* has been recovered from various fragments of plaster pieced together. Upon it are ears of a bearded wheat, alternating with square and circular medallions set with jewels. The style of painting, the touch and brush work are the same, though rougher, as in the wall paintings of the houses of Pompeii or Rome. As far as could be ascertained, the materials were also similar to those used in Italy.

<sup>1</sup> See Pl. III., where the edge of the pence roof of the peristyle is visible.

## A HISTORY OF HAMPSHIRE

Yet another form of adornment of the chambers of these Romano-British houses must be mentioned, namely, mosaic pavements. These, although not more interesting than the painted work, are better known, specimens of this class of ornamentation being numerous enough in Britain. At Silchester there is scarcely a house which did not possess them of one quality or another. In the general way the floors of out-houses and similar places were apparently of clay ; a rather better class, such as storerooms and kitchens, were of mortar ; and in the poorer houses and in inferior rooms of the larger sort a coarse *opus signinum*. Other floors are of tile ; but universally for corridors, and frequently for rooms also, a coarse tessellation was adopted, consisting of cubes more than an inch square, either of red brick or a buff sandstone. Sometimes both kinds are combined in a pattern. Pl. IV. shows part of such a pavement, that of the main corridor of a large house in *Insula I*. Another curious class may be noted here, in which *tesserae* of half-inch cubes, black, white, and red, are mixed promiscuously in a sort of "pepper and salt" arrangement, or laid in bands of irregular width. These floors, however, are of the common kind. Others, rich with braidwork and floral ornament, have been found on the site ; notably in a large house in *Insula XIV*. Four, probably five, of the six rooms making up the eastern range of this fine mansion, were floored with squares of fine mosaic work, laid in grounds of the larger red *tesserae*. The most elaborate of these may be seen on Pl. V. But by far the best of these pavements was one found in 1898, in the south-west quarter of the town, amongst the wreck of a house partly underlying a later one, in *Insula XIX*. The first house must have been one of the earliest built on the site. It was of half-timbered construction, and may have dated between 70 and 80 A.D., the pavement having been laid a few years after the latter date. No mosaic so good or of so early a time has yet been found in this country. What remains of it, unfortunately too little, is represented on Pl. VI. The Greek character of the large scroll with ivy-like leaves, and the frieze of acanthus foliage, are quite dissimilar from the usual forms of ornamentation on pavements in Britain, and show the early date of the mosaic. The ordinary pavements, as has been mentioned, are laid with cubes over an inch square ; but in those of a more elaborate kind, such as in the one just referred to, they are generally half an inch square, and occasionally, though rarely, much less. The *tesserae* of all these floors are of native materials : sandstones, and calcareous limestones, hard chalk, and sometimes Purbeck marble. The bright red tints are invariably of brick, which is occasionally used for the pale yellows. No foreign marbles have as yet been detected in the floors at Silchester.

The damp perhaps as much as the cold of our climate renders artificial heat a necessity for a considerable part of the year, and we find, in consequence, provision made for warming some at least of the chambers in most of the houses at Silchester. The hypocaust was, as usual, the means employed for the purpose. The form it mostly takes on this site is that of a pit sunk in the floor of the room to be warmed, with passages



# ROMANO-BRITISH REMAINS—SILCHESTER.

MOSAIC FLOOR. West End of North Corridor, House No. 2, Insula I.

PLATE IV.



The Victoria History of the Counties of England—Hampshire and the Isle of Wight.

Scale 1 Inch to a Foot.

GEORGE E. FOX, Delt.

*To be bound in the Roman Section.*





## SILCHESTER

from it to flues in the walls, which by the heat given off by them helped to warm the air of the chamber. In the pit spoken of small brick pillars supported the floor of the room, the passages to the walls being covered with tiles. A wider passage from the outside of the building to the square pit under the floor of the room constituted the furnace, and into this the fuel was thrust from without, and the fire once lit was maintained. This system of warming was in practice much like our hot-air system ; but unless with certain exceptional arrangements, it probably did not give quite as much heat in proportion to the means employed as our method does. The hot air and products of combustion passed up the vertical wall flues to a chimney or vent above.

As far as the sizes of the houses are concerned, as a whole it may be said that they afforded as much accommodation as middle-class houses of the present day, and with rooms as large as are usually to be found in such houses. Some are of considerable size, veritable mansions spreading over a large area of ground, such, for instance, as those in *Insula XIV*. Taking all circumstances into consideration, the houses of *Calleva* were as spacious, and gave as much or more comfort to their inhabitants as those of any English town during the last century.

Before leaving the subject of the domestic buildings found at Silchester, it would be as well to say that in no respect do they resemble in plan the Roman house as seen in the south of Europe, as, for instance, in Pompeii. That type of dwelling was built to afford shelter against heat and an excess of light, whilst that which is found here was intended for protection against cold and damp. The objects aimed at by the builders in Italy and in Britain were completely opposed to one another, and hence the difference of plan. How this difference of plan arose is a question not easily answered. It probably was developed in Gaul as early as the Roman conquest of that country. It is doubtful if it could have owed much, if anything, to the rude dwellings of the conquered Celts, far too primitive and barbarous to have afforded hints to their civilized conquerors.

Of the trades, or at least of one trade, practised by the inhabitants of the town, there are considerable traces. A large quarter of the site, on the north-west and west, appears to have been occupied by dyers, if the remains of furnaces in this quarter, resembling those found in the dyers' establishments in Pompeii, may be taken as indications of the existence of such an occupation. Workshops containing these furnaces have been uncovered along the main street from the west gate to the *forum* and elsewhere, and it is conceivable that in these workshops the rough material for the dyes employed may have been manipulated.

Vaguely, various small industries have been detected in the course of the excavations, bone carving, and, possibly, the casting of small objects in bronze, being amongst them, but the main trade of the town seems to have been that of the dyer, as noted.

From the rubbish pits many relics have been brought up. They

## A HISTORY OF HAMPSHIRE

have revealed the bones of the animals used for food, such as ox, sheep, pig, and occasionally goat. From them come also the skulls of dogs of different sizes, and, in a few instances, those of cats. The cat was probably a pet, though rare, in those times. The bones of the horse have been found, and sometimes the leg bones of fowls showing well-developed spurs, from which it may be guessed that cock-fighting may have been an amusement of the townsfolk. Out of these pits have also been dug up most of the objects worth preservation. The amount of pottery, both from surface trenches and from pits, is surprising. Specimens, many of them perfect, of every variety used in this country in the Roman period have been extracted from them. Iron objects of every sort and description are constantly turned up. One pit produced a complete hoard of articles in this metal, sixty in number, amongst which were a fine portable cooking stove or grid, a lamp, a carpenter's plane, and carpenters' tools of various kinds, with other objects. Fragments of glass vessels in all varieties, together with window-glass, bronze objects of all kinds, and those in bone, shale, and leather, are constantly found; in short, it would be impossible to give here even a brief description of the more important remains which have been discovered.

At the end of the first year's excavation in 1890, these objects had so accumulated in the hands of the executive committee that it was thought necessary to take steps for the proper housing and exhibition of them. The matter was submitted to the Duke of Wellington, who, as before stated, is owner of the soil, and his desire was that they should be preserved as near the site as possible. While the subject was under consideration, the municipal authorities of Reading, by the advice of the late Dr. Stevens, the honorary curator of the town museum, offered to find room for them in that museum, and they were consequently placed at Reading on permanent loan.

In this way the remains from the Roman town have found a home, and the collection has grown from year to year until it bids fair to become one of the most important in this country, two facts contributing to this result: (1) That all the objects are from the same site; (2) That the hitherto neglected fragments of architecture, next in importance archæologically to inscriptions, have been carefully preserved, and supplemented by models, made to scale, of some of the more important buildings excavated. The finest mosaic pavements have also been lifted and placed bodily upon the walls of the museum.

Finally, having sketched in these pages the edifices, public and private, of the Roman town, with here and there a note of the possible date at which they were erected, some few words may be added in explanation of the disappearance of *Calleva* from the list of inhabited sites.

It must first be premised that the town contained within the limits of its walls more dwellings than are shown on the plan, as only definite traces of walls and foundations are there laid down. Though there were considerable areas of open ground, without doubt, in the ancient



ROMANO-BRITISH REMAINS—SILCHESTER.

MOSAIC FLOOR. House No. 1, Insula XIV.

PLATE V.









## SILCHESTER

town, these were in part occupied by inferior structures, either half-timbered or even of cob-walling. The trenches occasionally show the ruins of floors of mortar and clay, and now and again layers of tiles, as if from fallen roofs, but such traces are often too vague to be placed on the plan. It may therefore be conjectured, with considerable approach to certainty, that if the land within the walls had not been brought at an early period under the plough, more of the buildings would have remained to reward explorers. The general clearance of the ground necessary for ploughing, and the ploughing itself, may be said to have planed down, even scarified, the site, making a clean sweep of what remained of buildings of inferior construction. Constantly masses of flint rubble even are found which have been partially broken up for carrying off, and many hypocausts have been partly destroyed for the sake of the tiles used in their construction. Certainly all the building material which could be readily obtained was early cleared away; even down to the present day this has been the case. The town walls have been thus in part destroyed. After centuries of this plundering the wonder is, not that so little, but that so much remains.

As a sort of rule, every Roman town or villa is supposed to have been burnt down by the Teutonic invaders. There is little sign of this kind of destruction at Silchester, where facts appear to point instead to a gradual decay or abandonment. In any place taken by storm, the remains of the inhabitants killed in fight or by massacre would be found, as they have been found in the kindred Roman city at Wroxeter, which was thus taken. Very few human remains, however, have been dug up at Silchester; none in the houses. One or two cinerary urns have been come upon, and these were probably deposited in the earth before the town was walled. Blotches of burning were visible in the mosaic floor of a house in *Insula* I., a part of which is figured in Pl. IV., and this house may have been burnt down. This is the only trace of such destruction that has been found. Here and there marks of fire are to be seen on the mosaic floors. These can be accounted for in other ways, however, than as traces of conflagrations.

The most distinct evidence of the decay of the town is to be found in the partial blocking up of its gates. Either the inhabitants concluded that the wide gateways were not needed on account of lessened traffic, or with a lessening population were too large to be easily defended. The smaller west gate was much decreased in size by a roughly built wall, and the roadway raised within that, reducing it to a mere postern, probably reached by steps from the outside. The southern of the two archways of the main west gate (see fig. 3) had been blocked in the following manner: The valves of the gate were shut; near their junction on the outside was placed a drum of a double column, and upon it a massive coping stone from one of the battlements of the wall, and over and around these fragments a wall was built against the closed doors of any materials that came to hand. The lower layer consisted of rough blocks of ironstone. Whether a portion of a fine Corinthian

## A HISTORY OF HAMPSHIRE

capital found just outside this archway came from the blocking cannot be ascertained, but it probably did so. Here not only was the structure of the blocking wall rude in the extreme, but the fragments of architectural detail, evidently from the largest buildings in the city, show that those buildings were partly, at least, in ruins before important members of them could have been put to the ignoble purpose described.

There is room for only two more instances of the gradual decay of the buildings of the town.

In a large house or mansion in *Insula XIV.* was a long gallery of fine proportions, evidently intended for display. It had an elaborately panelled mosaic floor, and doubtless originally richly painted walls. When this gallery or hall was cleared in 1895, upon its mosaic pavement lay in two or three places masses of mortar left by masons who had mixed it there, using the pavement for the purpose, for some repairs upon what must have been the then partially deserted building. Clearly the discovery indicated a fall in the fortunes of the mansion in which it was made. But a further story has yet to be told. The centre panel of the mosaics which had covered the floor of this same gallery represented the bust of some divinity or hero. A spot, black with fire and ashes, occupied a part of the place where the bust had been, while the remaining *tesserae* about it were changed in colour and partly calcined with the heat. The damage had not been caused by the fall of burning beams, as no signs of burning were to be seen anywhere else. It was caused simply by the lighting of a fire upon the mosaic floor. It was perhaps the work of wandering herdsmen, who, sheltering themselves among the ruined walls, had passed the night in this now desolate place.

Afterwards came the levelling of the ruins. Walls and heaps of rubbish of the fallen buildings were gradually swept away, column and carved stone carried off to be used again in the foundations of village church or not distant abbey, and the land year by year was gradually brought into the condition in which it is now seen, of even fields within a ring of forest trees growing upon and half hiding the only visible remains of the Roman city.<sup>1</sup>

<sup>1</sup> For detailed reports of the work of the Silchester Excavation Fund, see *Archæologia*, lii. 733-758, liii. 263-288 and 539-573, liv. 199-238 and 439-494, lv. 215-256 and 408-430, lvi. 103-126 and 229-250. All the plans and drawings therein referred to are deposited in the Library of the Society of Antiquaries.





FRAGMENT OF MOSAIC PAVEMENT FROM INSULA XIX.

(WITH RESTORATIONS SHEWN BY DOTTED AND WHITE LINES.)

(SCALE=ONE INCH TO A FOOT.)

*To be bound in the Roman Section.*





# ANGLO-SAXON REMAINS

ANYTHING that may be said with regard to the history of the district now known as Hampshire during the fifth and sixth centuries is subject to at least two qualifications. The first arises from the very limited information that can be gathered from the few local remains of the pagan Saxon period, and the other from a possibility that the early notices in the Anglo-Saxon Chronicle and other records, however suspicious in appearance, may preserve some genuine traditions that cannot lightly be set aside. Nor can much positive evidence on this matter be derived from the physical traits observable at the present time in the inhabitants of this part of the country. Though form and feature may in many cases reveal facts in the history of a people otherwise unrecorded, the accidents of about 1,500 years may well impair the accuracy of deductions from data of this kind. Some information can indeed be obtained from the survival of old place-names and the physical character of the district, and valuable evidence may sometimes be gathered from the distribution of relics in the soil ; but such arguments are always liable to be overthrown by fresh discoveries, and are in any case based on accident and hypothesis. It is not till the introduction of Christianity, early in the seventh century, that Anglo-Saxon history rests on literary records, which have been continually examined and manipulated. The present chapter deals more especially with the remains and characteristics of the people of Hampshire during the obscure period of paganism, and passes into the province of the historian only where the annals seem to come in contact with the ascertained facts or provisional deductions of archæology.

As other means of determining the character of the Teutonic settlement of Hampshire are lamentably meagre and inconsistent, special attention should be paid to the geography of this part of the country. A part, if not the whole, of the coast-line lay beyond the limits of the Saxon shore, the 'litus Saxonicum' of the *Notitia Imperii* ; and though military and naval stations existed in the neighbourhood of the Solent, Hampshire does not appear to have been so liable to piratical depredations as the south-eastern coasts of Britain. Whatever the origin of the term, the 'Saxon shore' would no doubt be the region of the earliest

## A HISTORY OF HAMPSHIRE

Teutonic settlements ; and the names of Essex and Sussex fix at least two of the districts that were occupied by Saxon immigrants.

But the case of Hampshire seems to have been different, and the reason is perhaps to be found in the physical condition of its coasts in the fourth and fifth centuries of our era. The shores of Southampton Water, the New Forest, and the flats round the great harbours did not possess sufficient attractions for warriors of maritime nations, who must in many instances have claimed from their Roman generals a permanent home in other and more fertile districts near the sea as a reward for past military services. While it is more than probable that Teutonic veterans were thus provided for in localities more or less of their own choosing, there is nothing to prove at what time the coasts of Hampshire were first appropriated by people of Germanic blood.

The remains of villas and other indications of Roman civilization within the modern limits of the county are enough to show that the population was mainly confined to the central chalk plateau, and that, with the exception of the military stations and the lines of the principal Roman roads, the lower country to the south was practically uninhabited in Roman times. The clayey soil in these parts was favourable to the growth of oak-forests, which were only interrupted by barren heath or impassable swamp, and it was not till long after the Teutonic immigrations that the coast districts were cleared and drained. Taught by their Roman masters, the Britons would no longer acquiesce in such unhealthy and unprofitable surroundings ; and the way would thus be left open, when Roman discipline was relaxed at the close of the fourth century, if not at an earlier date, for any strangers excluded from the Saxon shore, yet driven by necessity, to find a home in British territory. To the pirate cruising in the Channel the white cliffs and rolling downs of Kent and Sussex must have been far more inviting than the mud-flats of the Hampshire coast, but only the bravest and the fiercest could hope to gain a footing on shores so jealously guarded by Roman legionary or Saxon veteran. And it is likely that, even while the high chalk ground in Wight was occupied by the more wealthy and civilized Briton, the lower tracts of marsh and forest on both sides of the Solent and further east were the refuge of a meaner race of Teutonic origin, whose approach spread no alarm, and whose proximity gave no annoyance to the Romanized inhabitants who were still in possession of the most desirable localities.

The early centuries of what is generally called the Anglo-Saxon period form the most obscure passage in the history of the county, and it is only by ignoring fables and depending on circumstantial evidence that the problem can ever be solved. At the very threshold of the inquiry we fall in with the Jutes, who are inseparably connected with the Isle of Wight and part of the mainland ; but before defining the period and extent of their immigration, it is well to confess how little is known about their origin and affinities.

A point of departure is found in Bede's statement that ' from the Jutes, who were one of the three most powerful nations of Germany,



## ANGLO-SAXON REMAINS

were descended the people of Kent and of the Isle of Wight, and those also in the province of the West Saxons, who are to this day called Jutes, and are seated opposite to the Isle of Wight.'<sup>1</sup> In their original home they had been the northern neighbours of the Angles, evidently in what is now called Jutland. Such, at least, is the tradition which was to all appearances current in Hampshire in the days of Daniel, who was bishop of Winchester in the first half of the eighth century, and was in communication with the venerable historian. Against this testimony must be set that of Procopius, who wrote in the sixth century. This Byzantine historian asserts that the leading races in Britain were the Angles, Frisians and Britons.<sup>2</sup> That the Frisians had some settlements on the north-east coast of England and in parts of Scotland is vouched for by authentic records ; but there is no absolute proof that the Teutonic invaders of Hampshire belonged to that race, unless we are to argue from the occurrence of Ems as a river name on the Sussex border and in the Frisian region of the Continent. It has been maintained by some that the term Jute, which is written in several ways, is philologically the same as Goth, and the two names are indeed associated by Asser, who says that Osburga, the mother of King Alfred, was daughter of Oslac, the famous butler of Ethelwulf, and Oslac was a Goth by nation, being descended from the Goths and Jutes, of the seed, namely, of Stuf and Wihtgar.<sup>3</sup> Whatever the origin of the name, the precise connection between Jute and Frisian has not been determined, though the evidence of philology, as far as it goes, points to a close relation between the two races.<sup>4</sup> It may be observed that emigrants, whether from Jutland or Frisia, would find the low-lying coasts of Hampshire not unlike the country of their birth ; and even if there be no historical truth in the words put into the mouth of Hengist by Geoffrey of Monmouth<sup>5</sup> to account for the wandering of his people, there is good contemporary evidence of the rapid increase of tribes already settled in Britain, and of their intercourse with the Franks during the sixth century.

In view of the explicit statements of Bede, and the later testimony of Florence of Worcester, who is by some supposed to have had access to, and made good use of, documents no longer in existence, the term Jute will be used to denote the earliest Teutonic inhabitants of Wight and the coast-districts of the mainland, even though there is little archaeological evidence at present to connect the island with any part of England except Kent.

It will be noticed that the principal rivers of Hampshire flowing into the Channel retain the names that have been handed down, from Celtic or earlier times, through the Roman and Anglo-Saxon periods to our own day. The smaller streams, however, bear names evidently of

<sup>1</sup> *Ecclesiastical History*, i. 15.

<sup>2</sup> *De Bello Gothico*, iv. 20.

<sup>3</sup> *Life of Alfred*, p. 1 (Camden) ; cf. Procopius, *de Bello Gothico*, ii. 6.

<sup>4</sup> W. H. Stevenson, in *English Historical Review*, 1899, p. 43, note.

<sup>5</sup> *British History*, vi. 10.

## A HISTORY OF HAMPSHIRE

Teutonic, Norman, or even later origin, and this is specially noticeable to the east of Southampton Water. The names Stour and Avon, Itchen and Yar, are so distinct philologically from Lymington, Hamble, Titchfield, Wallington, and Ems, that it is reasonable to assume a corresponding racial distinction between the original dwellers on their banks. Where no British trackway or Roman road existed, the rivers afforded the most obvious and frequently the only passage into the interior, and it is along their banks that the earliest settlements, whether of Celt or Teuton, are to be traced. The names of the more conspicuous natural features might in any case have survived the Celtic period, and are not the best evidence of a late or partial conquest. But on the other hand the lesser waterways of Hampshire, which at the coming of the Teutons were nameless or were then renamed, would pass under foreign control at an early date, as they lay open to approach from the sea. This does not, however, exclude the possibility of peaceable relations, or even co-operation, between the early immigrants from Germany and the Romanized Britons. It cannot be too often insisted on that the supposed annihilation of the native Britons is as unsupported by archæology as by probability and historical experience ;<sup>1</sup> and it may well be that the British population, abundant as Cæsar found it half a century before the Christian era, had not spread to every corner of the land, but, following the Roman fashion, had been drawn from the country by the luxuries and amenities of town-life. There must have been, therefore, in the less fertile districts ample scope for the new-comers, who would bestow their own names on places with no Celtic traditions. National habits, too, had something to do with the distribution of the two races. The Britons had adopted the Roman methods of husbandry, and during the four centuries of their apprenticeship had become competent agriculturists. The less civilized immigrant, whether Saxon or Angle, Jute or Frisian, would depend for the most part on his flocks and herds, for which the glades of the forest and an unstinted supply of mast were more than sufficient. Thus the two peoples could dwell side by side without friction ; and that matters were in many cases so adjusted is evident from the relics of the past. The author of the *Making of England*<sup>2</sup> has placed the commencement of a better understanding between Briton and Teuton about the date of the battle of Deorham, in A.D. 571 ; and it is generally assumed that by the middle of the seventh century Christianity had done much towards obliterating social or political distinctions founded on race. The traditional view that the natives were exterminated is derived, in the first instance, from Gildas, a very questionable authority ; and whether extermination be taken in its strict etymological sense of driving beyond the border, or as equivalent to annihilation, the available archæo-

<sup>1</sup> On the general question of the Romano-British survival, see Grant Allen, *Anglo-Saxon Britain*, chap. vii. ; Prof. Rhys, *Celtic Britain*, pp. 108, 109 ; Prof. Rolleston, *Scientific Papers and Addresses*, vol. ii. pp. 611, 681 ; F. Haverfield, *English Historical Review*, 1896, p. 428 ; T. Nicholas, *Pedigree of the English People*, chap. i. section vii. of part iii.

<sup>2</sup> Fourth edition (1897), vol. i. p. 225.



## ANGLO-SAXON REMAINS

logical evidence is all on the other side. The ruins of Silchester at least show that the town did not meet the fate of Wroxeter ; and as there is no record or indication of the destruction of Winchester, the Belgic capital, it is fair to assume that on the departure of the legions the towns were suffered to decay. The Roman coins that have been found in large quantities within the county border show commerce with the outside world at least till the opening of the fifth century, and a discovery of another kind, to be noticed presently, has been thought to indicate Romano-British influence in this part of the country for two and a half centuries longer. Slight indications of a similar state of things have been found at the county's southern extremity, which would naturally first suffer from Teutonic inroads. While it is easy to over-estimate the significance of the discovery of a gold coin of the Emperor Libius Severus (A.D. 461-465), at Mountjoy, near Carisbrooke, definite conclusions have been drawn from the condition of the ruins of Roman villas in the island.<sup>1</sup> The sites appear to have been voluntarily abandoned ; and if this was the case in an island which afforded no means of isolating the natives from the immigrants, we must be prepared to discount the harrowing tales of Gildas, who wrote of the misdoings as well as the misfortunes of his countrymen from his asylum in Armorica.

The unappropriated and therefore undefended coast-districts, in which the archæological map shows little trace of Roman habitation, were probably occupied at an early date by the Teutonic invaders of Hampshire ; and the presumably Jutish dwellers in the Meon Valley may well have been among the first. Of the three traditional Jutish areas, however, that occupied by the Meonwara seems to have been the poorest in more than one sense, though all alike were shut in by natural barriers : Kent by the Andredsweald, the marshes of Romney, and the Thames estuary ; Wight and the Meon Valley by the sea and the other extremity of the great forest of the Weald. From none of the three was there direct access to the more spacious tracts of the interior, which afforded room for the expansion of the enterprising Saxon and Angle. And perhaps it is no idle fancy to see in the selection of their sites, and in their apparently unhindered occupation of them, a proof of the pacific intentions and unambitious temper of the Jutish strangers. The mild climate and natural riches of Kent and the Isle of Wight go far to account for the early admixture of Frankish elements ; but the Jutish communities on the mainland of Hampshire preserved their integrity for at least two and a half centuries, and the territorial name may have survived even into Norman times.

The district appropriated by the Jutes is vaguely indicated by Bede, who in his Ecclesiastical History speaks of Wight in the following terms :—‘ The island is situated opposite the division between the South Saxons and the Gewissae, being separated from it by a sea, three miles over, which is called Solent. In this narrow sea, the two tides of the ocean, which flow round Britain from the immense northern ocean, daily

<sup>1</sup> J. E. and F. G. Hilton Price, *Remains of Roman Buildings at Morton, I.W.*, p. 34.

## A HISTORY OF HAMPSHIRE

meet and oppose one another beyond the mouth of the river Homelea (Hamble), which runs into that narrow sea from the lands of the Jutes which belong to the country of the Gewissae.<sup>1</sup> The double tides in the arm of the sea here referred to are well known, and if the Solent be taken to include Southampton Water, the identification of the river is fairly certain ; but as so much has been founded on this statement, it is as well to point out that the present river Hamble does not flow into a sea that is three miles across, nor do the words quoted prove that the Jutes on the mainland were confined to the valley of the Hamble, or, we may add, the Meon River.

To the south of a line drawn from Havant to Titchfield, the ground does not rise 100 feet above sea-level, while immediately to the north of it Portsdown forms the southern boundary of the Forest of Bere, which was as yet intact and impassable except along the rivers that flowed through it from the chalky highlands beyond. Between Titchfield and Southampton a somewhat higher level is reached ; but Bere Forest is known to have stretched to the walls of Southampton in historical times, and a study of the geological map will make it almost a certainty that along the coast from Southampton to what is now the Sussex border there was a continuous belt of water-logged oak-forest, through which none but Roman engineers could have built a road. It has already been pointed out that the few indications of Roman occupation in the south of the county bear an obvious relation to the Roman road or roads that linked the military stations of Bitterne and Porchester to the Belgic capital. With the general insecurity arising on the withdrawal of the legions and the presence of pirates in the Channel during the early years of the fifth century, it is probable that even the few Romanized Britons who had commercial or other interests in the district, retired to the interior for the greater security of life and property ; and natural barriers alone remained to prevent the spreading of the immigrants who had probably towards the end of the previous century made the Meon Valley their home. Nor is it rash to conjecture that, even with the Roman power at its height in Britain, some petty and unobtrusive settlements were allowed in regions hitherto unoccupied. It is conceivable that, so far from hindering such enterprises, the Government might consider it good policy to encourage them under certain conditions. Though Roman administration and commerce required the lines of communication with the sea to be adequately protected, little but economic advantage could result from forest-clearing and agriculture in the waste by means of alien labour.

The stages of the Jutish progress are marked by a succession of townships along the Meon Valley from mouth to source. Meon, Titchfield, Wickham, Soberton, Droxford, Meonstoke, Corhampton, Warnford, and Meon East and West were all existing in the eleventh century, and in all likelihood had then been founded nearly six hundred years. To this list may be added Boarhunt, which is situated on the northern slope

<sup>1</sup> Bk. iv. chap. xvi.



## ANGLO-SAXON REMAINS

of Portsdown, overlooking the vast expanse of forest now called East Bere ; Hambledon, on the rising chalk north of the same forest ; and Hamble, Botley, and (Bishop's) Waltham in the valley of the Hamble. The hundred of Mansbridge, which lies between the Meon and the Hamble, may possibly owe its name to the Meonwara ; while that of Meansborough, sometimes cited in this connection, not only lies well outside the Meon district, but is shown by the Domesday form to derive its name from a different source.

Bede's statement is, however, precise enough to justify the expectation of finding characteristic Jutish remains in the island and its neighbourhood, and a general resemblance was long ago noticed between the objects found in the pagan graves of Kent and the Isle of Wight. As both districts are definitely recorded as the seats of Jutish immigrations, there is every reason for assigning their name to this particular type of relics. The parallel, however, is not complete, for up to the present time no discoveries on the coast opposite the island have revealed any trace of Jutish occupation.<sup>1</sup> It is possible, though hardly to be expected, that similar finds will some day be made in the Meon district, or on the edges of the New Forest ; but it seems clear that at least no such conspicuous grave-mounds exist in those regions as have yielded so much to exploration on the island downs. Perhaps the true explanation is that the lower ground on both sides of the water was inhabited by a poorer population, whose graves would have no mounds or deposits of ornaments and utensils.

It is quite in harmony with the view expressed above that no accounts, however distorted, of any collision in these parts between natives and intruders have come down to us ; but it is probable that when the chalk ridge that continues the line of the South Downs was reached, progress was not unhindered. The natural surroundings of the point where the Meon River has carved a passage through the chalk, are very similar to those of Winchester. In both cases the gap in the transverse range of downs opens the road to an upper valley, that must in the early days have presented a contrast to the lower courses of the river. To the north were great stretches of upland, affording rich pasture ; while the woodland was confined to the hillsides and bottoms, where sufficient soil had been washed down to encourage the growth of oak and beech. South of this range were the clays and sands of the Hampshire basin, with large surface patches of flint-gravel forbidding cultivation.

The eminences that commanded both openings in the Downs undoubtedly became British strongholds, and although the earthworks have partially disappeared, they must have formed part of a strong line of defence stretching right across the county. Whatever the etymology of Win-

<sup>1</sup> With possibly one exception, noticed in *Hampshire Notes and Queries*, vol. ii. p. 11, where a newspaper paragraph is quoted : 'Brooches of a peculiar form which have been found in Kent and the Isle of Wight have been discovered in the Meon country. They occur nowhere else in England. They do occur in certain of the Danish mosses, and the natural conclusion is that the design and peculiar decoration were Jutish.' The objects have not been traced.

## A HISTORY OF HAMPSHIRE

chester, it is evident that Old Winchester Hill commands a break in the downs that closely corresponds to that made by the Itchen Valley eleven miles to the north-west ; so that the repetition of the name would not be extraordinary, especially as 'Venta' occurs also in other parts of Roman Britain.

To the north of the barrier of chalk which stretches right across the county, the Romans found in most places less forest and everywhere a lighter soil ; and their remains, in consequence, are no longer confined to the immediate neighbourhood of the great rivers. The agricultural population of these parts would resent the intrusion of the foreigner, and it was here, if anywhere, that the Meonwara had to fight for the soil. No such struggles are recorded, however, though it is evident that the Romano-British positions on Beacon and Old Winchester Hills must have been taken before the new-comers could settle on the upper waters of the Meon. The river valley here turns eastward, penetrating the Andredsweald, which is known to have reached Privett, and apparently extended much farther west towards Winchester. The open country that fell to the advancing clans was not extensive, but had the advantage of being enclosed by wide tracts of woodland, not so dense or swampy as farther south towards the sea, but sufficient to isolate their townships on the river, such as Warnford and the two Meons. In days when there was no central authority, and commerce was restricted to the towns, isolation was a guarantee of peace, if not of plenty ; and it was no doubt owing to their surroundings that the Jutes were able to preserve for so long their independence and their name.<sup>1</sup>

It is not contrary to the evidence of Bede to suppose that the districts watered by the Meon or Titchfield and the Hamble were the principal seats of the Jutes on the mainland of Hampshire ; but leaving the Isle of Wight to be considered later, there seems some indication of Jutish settlements on the coast west of Southampton Water. The name Meonwara had more reference to locality than to race, and at the time of their immigration the Jutes cannot have found much to choose between the south-east and the south-west of the present county ; and any advantages the east possessed were to some extent counterbalanced by an important military road lying right across their path into the interior. The two roads that can perhaps be traced from Nursling southward, to the sea near Lepe, and to the west in the direction of Ringwood, were of secondary importance ; and it has been suggested by a county historian that Stone, at the southern extremity of the former road, represents 'Ad Lapidem,' the place where the fugitive sons or brothers of Arvald, king of Wight, were betrayed into the hands of the West Saxon king, Caedwalla.<sup>2</sup> The proximity of Redbridge, where the abbot Cynebert had his monastery, explains the choice of Stoneham as the modern equivalent of a place that probably derived its name from a Roman milestone ; but it is

<sup>1</sup> The isolation of the Meonwara is noticed by Mr. T. W. Shore in *Journal of Anthropological Institute*, vol. xviii. p. 339.

<sup>2</sup> Woodward's *History of Hampshire*, vol. i. p. 406.



## ANGLO-SAXON REMAINS

unlikely that the princes would have fled into the West Saxon territory, as most of Hampshire had doubtless become at that time. Stone, on the other hand, being the nearest point to Wight, on what may be called the overland route to the island, would be the natural landing-place for the refugees if the district were in the hands of their own kindred. Caedwalla, too, would find its proximity to the island equally convenient while recovering from his wounds.

Apart from this circumstantial evidence, Florence of Worcester, under the year 1099, mentions incidentally that the New Forest was in the province of the Jutes ; and the remark carries all the more weight inasmuch as the Jutish provinces had by that time been practically incorporated in the kingdom of the West Saxons for more than four centuries. A tradition that survived so long may well have been founded on fact ; and it has lately been pointed out that Ytene, which Florence of Worcester gives under the year 1110 as another name for the New Forest, may possibly represent a genitive plural Ytena, from Yte, the natural form assumed by Bede's 'Jutæ' in the West Saxon dialect.<sup>1</sup> The New Forest is included in the Jutish district also by Professor Freeman in a map given in the first volume of the *Norman Conquest*. The road through the forest skirted a district that must have had a fair sprinkling of inhabitants during the first four centuries, as the plastic clays were here manufactured into pottery, which was dispersed far and wide along the trade-routes. This northern area has an average elevation of well over 300 feet, and differed much from the low-lying and swampy wastes to the south and south-east ; while it is rather along the coast that the contrast between the two civilizations is evident. Thus, it is evident that the name Lymington was bestowed by the Teutonic invaders ; while the two Avons still attest by their names the continued presence of the Britons in their neighbourhood. It is easy to imagine that no opposition was offered to a landing in the forest area, but the Wiltshire Avon probably had a fringe of Romano-British communities on either bank to keep open the line of communication with their port in Christchurch Bay. This trade-route was defended by such hill-forts as St. Catherine's Hill and Warren Hill, nor is it unlikely that the battle at Charford represents some decisive struggle between the two races long before the year 519, under which it is recorded ; and a similar check to an advance along the Stour Valley may have been given by British warriors, who would be assisted by the natural strongholds of the district. It is in the site rather than the name that some justification can be found for Dr. Guest's famous identification of the 'Mons Badonicus' with Badbury Rings.

Ethnological reports on the distribution of the Jutes in this part of the country are not very explicit, but a few instructive observations have been made. The Jutish type is said to abound in the Isle of Wight, and Dr. Beddoe claims to have discerned it in Southampton, while he classes the Chichester district as essentially Saxon.<sup>2</sup> The inhabitants of

<sup>1</sup> *English Historical Review*, 1899, p. 42, note.

<sup>2</sup> *Races of Britain*, pp. 256, 257.

## A HISTORY OF HAMPSHIRE

the Avon Valley are principally Saxon, according to the same authority, who so far renders probable the Anglo-Saxon Chronicle's account of the doings of Cerdic and Cynric in that quarter. The racial affinities of the New Forest folk have not been ascertained in detail, but it is doubtful whether any sound conclusions could be drawn from characteristics detected in a district which must have been but sparsely populated in the early days.

Whatever the ultimate verdict as to the intervening districts, an examination of the characteristics of the modern population suggests the view that during the pagan period the Saxons were confined to the extreme east and west boundaries of the Hampshire coast. Archaeological discovery, or the absence of it, points in the same direction; and if an appeal be made to the literary records, the account of the supposed invasion and conquest of the district by Cerdic and his followers will be found to contain many obscurities and inconsistencies, and the term Saxon to be loosely used for any and every Teutonic tribe that gained a footing in Britain, just as the long-standing practice of our neighbours in Ireland, Scotland, Wales and Brittany, with regard to the name, is founded rather on language than on race.

An important point to notice in this connection is that the first Teutonic invaders or colonists of the county were apparently not so distinctively Saxon as those of Sussex or Essex. Otherwise it would be difficult to account for the fact that the name of the county preserves no record of the tribe which for about half a century is usually considered to have been confined to its borders. The local names would no doubt be invented soon after the settlement of a tribe; and before the expansion of Wessex, Hampshire would have had about as much right to the name of Sussex as the land of the South Saxons. Even if there were reasons for separation, Southampton Water would have been a more natural boundary between the Saxons of the west and south than the river Ems. Sir Francis Palgrave recognised that it would be more logical to look for early Wessex on a level with Essex and the later Middlesex, that is, north of the Thames Valley.<sup>1</sup> It is interesting to note that archæology points to the same conclusion. The evidence accumulated during recent years at least shows that a race or races who wore and buried with their dead, among other ornaments, a peculiar saucer-shaped brooch, inhabited the region that is roughly outlined by the Chilterns, the Great Ouse to the Warwickshire Avon and the Severn, and the Thames Valley on the south. It was on the basis of discoveries in Gloucestershire, Oxfordshire and Buckinghamshire that this type of brooch was ascribed to the West Saxons,<sup>2</sup> and it is hardly an accident that only a very limited number have as yet been found south of the Thames, and apparently none at all unearthed in Hampshire. A map

<sup>1</sup> *History of the English Commonwealth*, pt. i. p. 402; compare Sir Henry Howorth's remarks in *English Historical Review*, 1898, p. 671.

<sup>2</sup> The general use of these brooches by the South Saxons may yet be proved, as specimens have been found on High Down, near Worthing; see *Archæologia*, vol. liv. p. 372.



## ANGLO-SAXON REMAINS

indicating the sites would make the contrast more striking, but there seems a strong presumption that during the pagan period the people who spread throughout central England did not reach the Hampshire border.

On the supposition that Hampshire was the starting-point and headquarters of the founders of Wessex, it would be natural to expect abundant traces of their occupation there; but from the antiquary's point of view, Hampshire stands apart from its neighbours to the east and to the north. In the adjacent counties of Sussex and Berkshire a number of productive interments and even entire cemeteries of the pagan period have been discovered from time to time; while, apart from the Isle of Wight, very few Teutonic graves have come to light in Hampshire, and its archæological history for about two centuries is virtually a blank.

There is some danger of laying too much stress on an apparent connection between a certain type of brooch and the inhabitants of certain districts, and the discovery of specimens of the 'Wessex' variety at Sittingbourne, Croydon, and Harnham Hill, Salisbury,<sup>1</sup> may weaken the argument to some extent. One also seems to have been found in Wight,<sup>2</sup> but there is, on the other hand, sufficient warrant for connecting the richer relics from graves in Kent and the Isle of Wight with the Jutes, and there is certainly more to be learnt about the population generally as distinct from a ruling caste, from such homely ornaments as the saucer-shaped brooch of bronze. Further discoveries and careful records of them alone can determine the exact value of such inferences, but there is probably more evidence to be obtained from finds of this particular type than of the cruciform or other varieties which have been found in a much less restricted area. To facilitate research it may be useful to add that the brooches particularly associated with the West Saxons were circular, with a diameter of one and a half to two inches, gilt inside and curved up at the edges, the centre being flat and ornamented with an incised design consisting of geometrical figures or rough designs, surrounded by a broad band. The pin was of iron, and, though generally decayed, can always be traced on the back.

In the present state of knowledge, even the negative evidence of archæology is preferable to the obvious fables which for centuries represented the history of Hampshire in early Anglo-Saxon times. This is not the place to quote or examine in detail the annals dealing with the shadowy heroes whose very names arouse suspicion. It is enough to remark here that there is a significant silence as to the course of events in and around Hampshire for about a century; and when Christianity withdraws the veil early in the seventh century, the style of the Saxon Chronicle is found to be very different, myth having given place to history. In default of literary evidence, an examination of the natural features of Hampshire inland may throw some light on the progress of the Teutonic invasion.

<sup>1</sup> It should be noticed that Dr. Thurnam, in describing a skull from this site, was led to assign the burials to the Christian period (*Crania Britannica*, vol. ii.).

<sup>2</sup> *Archæological Journal*, vol. xiv. p. 75, where it is called 'scyphate.'

## A HISTORY OF HAMPSHIRE

The road or roads from Winchester to the sea must have been closely guarded as long as the legions were in Britain ; but not many years after their departure to save Rome from the Goths, we may presume that the Britons found the position untenable in face of the pirates then swarming in the Channel, and retired on Winchester, where they would be in greater security behind a belt of forest stretching right across their country in three sections, with the Test and Itchen intervening. The first-named river was fringed by the forest of West-Bere on one side, and by woodland that some historians have identified with Natanlea or Natley on the west, while the Itchen cut Bere into its two parts. Winchester too had its St. Catherine's Hill to stop a hostile advance up the river, and the downs on either hand formed another strong line of defence, stretching from Dean Hill on the Wiltshire border to Butser Hill on the east. The numerous Roman roads converging at Winchester would make it a favourable point at which to concentrate the British forces to defend their territory if threatened from the south. Though it is usual to speak of the fall of Winchester, there is no historical evidence of the date or even of the fact. If such an important city had been violently assaulted, some record of the action would be expected from the British bards or in the annals of the victorious invaders. But it is more probable that the city gradually decayed like Silchester, the sister stronghold to the north, which, flanked by Pamber Forest and the outskirts of the Andredsweald, would block an entry from the Thames at Staines along the Roman road now known as the Devil's Highway. The decline of Winchester would be partly accounted for by the occupation of the lower valleys of the two principal rivers of Hampshire by Jutish immigrants ; and though it is unlikely that the Jutes ever reached Winchester, the possession of the Southampton district would afford a useful link between the kinsmen on either side of Southampton Water.

That the seaport flourished as the ancient capital decayed is apparently demonstrated by the formal title of the county at the present day. The constitution of the shires is a vexed question, but it is generally agreed that Hampshire was among the earliest to be created, and received its name before the revival of Winchester in the first half of the seventh century.<sup>1</sup> Here, again, there is no positive archæological evidence that the site of Southampton was inhabited by Jutes in pagan times ; but in view of similar circumstances in the Meon district and elsewhere, this would not be a formidable objection. The name is certainly Teutonic, and may well have been bestowed by Jutes a century before Winchester was patronized by the kings of Wessex. The later shires generally had the county town in the centre, but in the sixth century Southampton had the prior claim to give its name to the shire, both on account of its early foundation as an English town and its superior importance as a commercial centre.

Mention is made in the Anglo-Saxon Chronicle of the district called

<sup>1</sup> J. R. Green, *Conquest of England*, vol. i. p. 258 (1899).



## ANGLO-SAXON REMAINS

Natanlea, a name that may now be represented by Netley, which occurs more than once in Hampshire. The region that fell to Cerdic in 508 is supposed to be the northern half of the New Forest, including the present Bentley Wood. Saxon characteristics have been recognised in the modern inhabitants of these parts, and some colour is perhaps given thereby to the tradition. Though this acquisition of territory would not be of much importance to the West Saxons at the time, it is possible that during the pagan period the people whose traces have been discovered near Salisbury spread in this direction till they came in contact with the Jutes. In contrast to this intrusive Saxon area, Dr. Mackintosh states that the population of the middle and north of Hampshire has characteristics very different from any to be met with in other parts of England.<sup>1</sup> It is for ethnologists to find an explanation, but it may be noticed that the phenomenon is stronger evidence against the original occupation of the county by West Saxons and their extermination of the natives than against its retention by the Britons, Belgae, or a blend of these with yet earlier races. The scientific excavations conducted by the late General Pitt-Rivers were mainly confined to Dorsetshire, but his discoveries were made near enough to the Hampshire border to afford some idea of the probable condition of this part of the county during the obscure centuries immediately following the Roman domination. They certainly suggest the hope that at no distant date some means will be found of following so excellent an example in a county where there are so many problems to be solved before its early history can be accurately written.

The geological condition of the Isle of Wight has already been treated of in another chapter, but must be briefly alluded to here as bearing on its history, especially in the early days of Teutonic occupation. Below Carisbrooke the rich valley of the Medina formed at this period a gap between two wide expanses of forest, the growth of which was encouraged by the soil north of the central ridge or backbone of the island.<sup>2</sup> Remains of this ancient woodland to the east of Medina can be clearly traced on modern maps, while it is plain that Parkhurst Forest was originally of far larger extent than at present; and while it was pierced by the main road to Carisbrooke from the ordinary landing-place of the Roman period in Gurnard Bay, to the west it must have joined the marshes in the basins of the Newtown River and the Yar. It is quite in accordance with the evidence afforded by Roman remains to assert that this part of the island had a very scanty British population at the time of the Jutish invasion, and was no doubt occupied by the new-comers on the same lines as the New Forest and Meon districts, which were of a similar character. The downs of the south must have supported a large native population, and had evidently attracted a fair proportion of their Roman masters. At the close of the fourth century such an exposed position must have become dangerous, and have speedily

<sup>1</sup> *Transactions of Ethnological Society*, vol. i. p. 215.

<sup>2</sup> See Mudie's *Hampshire*, vol. iii. pp. 76, 77.

## A HISTORY OF HAMPSHIRE

fallen a prey to the Teutonic tribes then infesting the Channel. Its small area, its isolation, and its unattractive surroundings to the north, sufficiently explain why it was left to the least among the three great German races, the Jutes, who seem to have felt the need for expansion less strongly than their kindred. Allowing them to have been the first and principal occupants of this district, the question now arises how to explain the marked absence of their distinctive remains on the mainland of Hampshire when they are so evident on the island downs.

A good idea of the rich discoveries that have rewarded archæological exploration on Chessell, Arreton and Shalcombe Downs will be obtained from the coloured plate with full-size drawings of the most interesting and characteristic objects. Some specimens may be seen in the Museum at Newport, but the bulk is preserved in the British Museum. These objects, which prove the taste and skill as well as to some extent the wealth and nationality of the invaders, were deposited in graves cut in the chalk, beside the dead to whom they had belonged; and it is to this pagan custom that we owe most of the information obtained with regard to the habits and ceremonies, the dress, arms and implements of the races from whom the Englishman of to-day claims his descent. The Jutish civilization belongs more especially to the history of Kent; but it is necessary here to give an abridged description of the discoveries, with reference to the plates, and to record a conviction, based on the comparatively large number of swords, the symbol of high rank, that the island was controlled by a governing caste whose presence involved the survival of a subordinate or servile population.

It is a probable inference from the archæological poverty of the districts bordering on the Solent, Spithead, and Southampton Water, that during the pagan period the power lay in the hands of chieftains who were Jutes and something more, dwelling in the more desirable parts of the island. Some of the remains discovered in the Jutish area in Hampshire as in Kent belong to types common on the Continent (figs. 8, 10, 13, 17), and it is easy to imagine constant intercourse between settlers on either side of the Channel. Moreover, there is literary warrant for connecting the Franks and the early inhabitants of Britain, for Procopius, in a chapter already referred to, states that the Franks settled emigrants who had been crowded out of Britain in the more desolate parts of their own country.<sup>1</sup> The passage suggests the view that the rich remains discovered in the island downs were once the property of Franks who claimed a sovereignty over Britain; or of native chiefs who derived their riches and authority from Frankish overlords beyond the sea.

A summary description<sup>2</sup> of the excavations conducted on the island downs will illustrate the importance of accurately recording and figuring the remains in graves or elsewhere before neglect or accident impairs

<sup>1</sup> *Monumenta Historica Britannica*, p. lxxxiv.

<sup>2</sup> Abridged from Hillier's *History of the Isle of Wight*, pp. 25-38; see also *Journal of British Archæological Association*, vol. v. p. 365, and the Winchester vol. (1845), with plate and woodcuts of the objects, including two glass vessels on p. 152.



## ANGLO-SAXON REMAINS

their evidential value. The earliest known discovery of Anglo-Saxon or Jutish antiquities in the Isle of Wight took place at the opening of some barrows or grave-mounds on Arreton Down in the year 1815, when seven skeletons were met with and some relics obtained, consisting of iron knife-blades, spear-heads, and part of an axe, two buckles and a comb, besides some burnt bones associated with urns of coarse pottery. In the following year more barrows were opened on Shalcombe and Chessell Downs, and yielded similar objects of bone and bronze, together with a pair of circular brooches of silver gilt, set with carbuncles and slabs of garnet. In the marl pits adjoining this site, skeletons often came to light, and graves could be seen in section along the upper part of the pit-sides. About thirty interments were discovered on this occasion, and contained iron swords, spear-heads, finger-rings and buckles, bow-shaped, circular, and bird-shaped brooches, beads of glass and amber, tweezers, and pottery.

Subsequent to the year 1818, when some graves were examined on Chessell Down with similar results, no excavations were made in the island from which any information of the Saxon period was derived, till the important discoveries by Mr. Hillier on the same downs in 1855, the year in which his unfinished history of the Isle of Wight was published. During that long interval the digging of marl had continued, and it is more than probable that many interesting and valuable remains were unwittingly destroyed in the lime-kilns. The search, however, on this occasion was very successful, and resulted in the discovery of nearly one hundred skeletons and a remarkable collection of antiquities. Some interments, which seemed from the condition of the bones and the lack of ornaments to be of earlier date, were found at the base of the down, together with a few examples of urn-burial; but the peculiarities of the Teutonic mode of burial were easily distinguished on ascending the hill, and the conclusion drawn at the time from the scarcity of weapons of war, apart from swords, was that the inhabitants had been but little affected by internal commotion or foreign attack. The richness of their personal ornaments further pointed to a comparatively high state of culture in the island, as well as to some connection with the people of Kent, whose remains are so strikingly similar.

A space of two or three feet generally separated the burials, which were from two and a half to nearly six feet below the surface, and the bodies were mostly placed north-east and south-west. There could be no doubt that mounds or some other mark of recognition had been raised over the dead. In some cases a heap of large flints was found just below the turf, and in others slabs of a local stone were unearthed which showed by their peculiar inclination that they had originally been placed upright at the head and sides of the graves.

When not cremated, the Anglo-Saxon peoples were generally buried in full dress, with their weapons, accoutrements, and various articles associated with the deceased, such as knives, buckles, or jewellery. Without going into excessive detail, it may be useful to mention the

## A HISTORY OF HAMPSHIRE

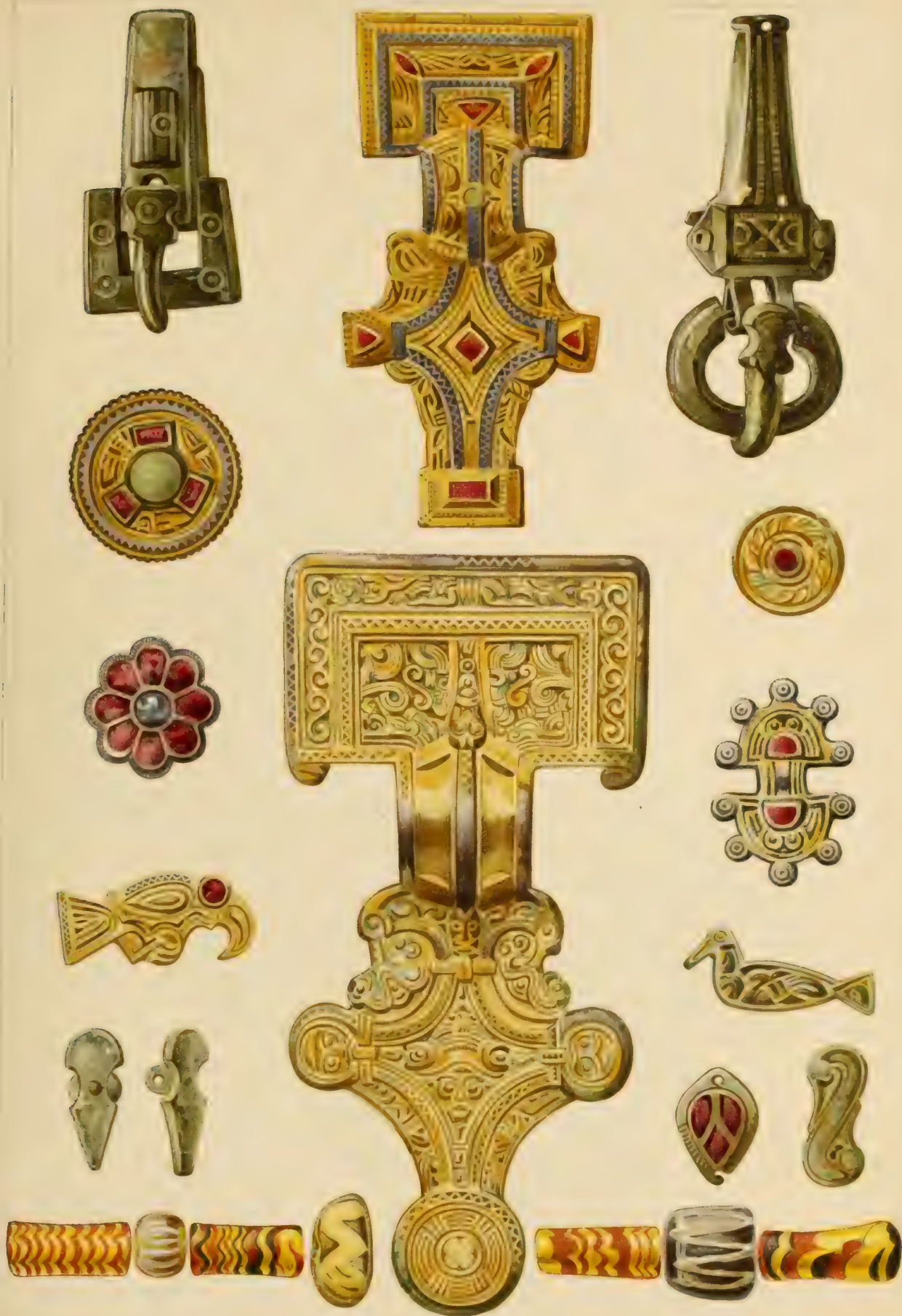
chief points of similarity between the objects found in the island and in Kent. Perhaps the most remarkable in this way are the silver-mounted spheres of crystal, the precise use and significance of which are still obscure. Some specimens of various sizes have been found in England, as at Kingston and Chartham in Kent, and also on the Continent, one occurring in the tomb of Childeric, the Frankish king, who was buried in the year 481. Both clear and black or smoky crystals are among the Isle of Wight antiquities. In more than one instance a specimen has been found in the pierced bowl of a spoon of silver or bronze-gilt (figs. 18, 22). Buckets of wood and bronze were also found in graves on Chessell Down, and instances have been met with in other parts of England; their use is uncertain, but they are supposed to have contained mead or wine and to have had a ceremonial meaning. One example in bronze (fig. 21) is specially noteworthy as having a punched design round the outside, representing leopards, with trees and flowers. The work shows considerable power, and betrays classical influence. The bronze bowls that came to light find more than one parallel in Kent, where one has been discovered full of hazel nuts, apparently a farewell offering to the dead. The presence of a bow about five feet long, and of the oxidized remains of about two dozen arrow-heads, if these are correctly described, is of peculiar rarity, but the other weapons are of the ordinary type. The sword-blades measure on the average thirty inches and are double-edged (fig. 23), while the length of a spear has been ascertained to be seven feet from the discovery of head and ferrule in their original positions.

Of the thirty-six brooches unearthed by Mr. Hillier, twenty-one are of silver and the rest of bronze-gilt, some of the specimens being ornamented with niello (figs. 2, 6). Those in the form of a cross have sometimes been hastily assumed to be from Christian interments, but they were introduced during the pagan period from the Continent, where they are said by an eminent authority to have been common, at least in Denmark, before the middle of the fifth century. The circular brooches (figs. 4, 5), faced with silver and set with garnets on gold-foil and coloured glass-pastes, certainly show an intimate connection with Kent, where the closest parallels occur, though the same types are frequently discovered in the Frankish cemeteries in the Rhine district and in northern France. The bird-shaped brooches (figs. 8, 10) are also common in Frankish graves, but are rare in England and very seldom occur outside the reputed Jutish area. The radiated brooch (fig. 17) belongs to a class generally found in graves of the same period on the Continent, especially in those of the Gaulish Franks, but, like the preceding type, in England practically confined to Kent.

The various kinds of brooches and studs here represented took the place of buttons and other fastenings, and in the Chessell Down cemetery never occurred singly (figs. 7, 9, 11, 13). The position which they retained on the skeleton seems to show that they were used to close the tunic at the neck and breast, while the waist was secured by a belt of



ANGLO-SAXON PERIOD.  
BROUCHES, &c., FROM THE ISLE OF WIGHT.









C. PRIETORUS.

ANGLO-SAXON PERIOD. OBJECTS FROM HAMPSHIRE AND THE ISLE OF WIGHT. (*British Museum.*)

Figs. 15, 16, 17, 18, 19, 22, 24, approximately natural size. Figs. 20, 21, about half the size of the original. Fig. 23, about  $\frac{1}{4}$  the size of the original, which measures  $36\frac{1}{2}$  in. in length.

## A HISTORY OF HAMPSHIRE

leather, the bronze buckles (figs. 1, 3) for which have been found in some quantity. The beads (fig. 14) were not apparently confined to the graves of females, and when not of glass-paste, are roughly shaped lumps of amber, the transparency of which has been impaired by decay. Though this material is found in its natural state on the eastern coast of England, the most productive districts then, as now, were the west coast of Jutland and the southern Baltic, the early homes of these Teutonic invaders of Britain.

For attack the spear must have been the usual weapon, and the shorter specimens found in the graves are supposed to have been used in the chase. The swords (fig. 23), which, as a rule, are much rarer, were adapted for cutting and not for thrusting, while the circular shields, of which little but the iron bosses and handles remain, were of lime or linden wood, probably strengthened with hide, and did not exceed eighteen inches in diameter.

Among so much that is characteristic of a particular race among the Teutonic conquerors of Britain, it is interesting and important to notice signs of other civilizations, such as small pieces of Roman tile and the red earthenware called Samian, which were present in some of the graves. Some of the beads (as fig. 24) as well as the elegant vase (fig. 20) recall the Roman occupation, while a piece of horse-furniture (fig. 19) is of a distinct late-Celtic type, such as the Britons produced in the days before the Roman occupation, and probably for a considerable period after the Christian era.

The earliest entries in the Anglo-Saxon Chronicle and derivative histories with regard to Wight are clearly mythical; and the break in its record for more than a century after the death and burial of the hero Wihtgar is of itself an argument that this part of the country was during that period isolated from the chief centres of Teutonic activity. The similarity of the natural conditions, more obvious then than now, of the districts round about Hampshire's arm of the sea, renders it more than a guess that the Jutes occupied at first the sparsely populated northern half of the island, and avoided conflict with the natives, though in course of time the Britons, losing the veneer of Roman civilization, gradually mingled with the strangers, or departed. The absence of pagan burials of this period is noticeable all over the mainland of the county; but though in the north there may be a solution of the difficulty ready to hand, the failure to discover any relics of the Jutes in the low-lying lands has still to be explained, or, what is better, remedied.

Ethelwerd and Florence of Worcester record that the conquest of Wight by the West Saxons cost only a few British lives, a view that is supported by more than one manuscript of the Chronicle, as well as by the circumstances of the case. Where all is so problematic, no final reconstruction of early Anglo-Saxon history is possible; but for years past archæological research in the county has been so unproductive of Saxon remains, that some doubt arises whether there still exist, hidden in the earth, relics that would throw light upon this question, for it must



## ANGLO-SAXON REMAINS

be remembered that the soil of the Hampshire basin has not the preservative properties of the chalk. Central and north Hampshire, on the other hand, would be well suited to keep intact the contents of pagan graves; and yet only a few insignificant finds have been recorded, such as a shield-boss and sword with a skeleton on Broughton Hill, a few bosses with bones in the vicinity of Winchester, and various relics at Micheldever, which appear to have been lost.<sup>1</sup> It is hard to believe that Hampshire was for one if not two centuries the headquarters of the West Saxons, whose presumed remains have been discovered in large quantities in other counties; and in this case the very paucity of the evidence may warrant a conclusion that would otherwise have waited on further developments. The close relationship alleged between the Saxon and Jutish leaders may represent a good understanding that seems to have existed all along between the two tribes, and to have resulted during the seventh century in the incorporation of the Jutish districts on the mainland into the West Saxon kingdom. It seems clear that Exton, the *Essesetun* of Domesday, represents East-Saxon-town, and, till that time, marked the eastern limit of the West Saxons in these parts; for, though close on the Meon River, it is not in the same hundred as the Meonwara towns.<sup>2</sup> If it be admitted that there is no trace of the Saxons in the county till about the Christian period, the foundation of Exton may be more exactly dated, for on that hypothesis it cannot be earlier than 634, nor later than 686.

The supposed friendly relations between Jute and West Saxon had been rudely interrupted by Wulfhere's conquest of Wight and the Meonwara country in 661, and the subsequent cession of these districts to his vassal, the king of Sussex. The campaign of Caedwalla, twenty-five years later, was apparently directed against the ruling powers, who had leanings towards Mercia, not against the subject population, for as late as the time of Alfred there were petty kings in the island, Albert, son of Aistulf, being the last of his line; and it was to Edward the Elder that, after an interregnum, the island finally surrendered its liberties.<sup>3</sup>

The events of the seventh century give support to the suggestions of archæology, and it is significant that a king whose name betokens British blood should put an end to the danger that had been threatening the reputed capital of Wessex for a quarter of a century. Winchester is not mentioned in the Chronicle till 643, when Cenwalch, in his new-born Christian zeal, laid the foundations of the old Minster. This somewhat tardy appearance of the royal city is in itself not remarkable, for the pre-eminence of a capital was not recognised to such a degree in Anglo-Saxon times as in our own; but, on the other hand, there are traditions of a British Church at Winchester surviving the Roman period, and the persistence of Christianity would account for the scarcity

<sup>1</sup> Referred to but not fully described in *Archæological Journal*, vol. vi. p. 399.

<sup>2</sup> Noticed in *Hampshire Notes and Queries*, vol. ii. p. 5.

<sup>3</sup> Gale's *Rerum Anglicarum Scriptores*, vol. iii. p. 538.

## A HISTORY OF HAMPSHIRE

of sepulchral relics in the county as a whole, but would exclude the West Saxons none the less till the seventh century.

Hampshire at the present day contains more Crown forest than all the other English counties together, and it is reasonable to suppose that in the early centuries of our era the tracts of woodland, which must have been far denser then, had much to do with its political history. The lower courses of the Test and Itchen no doubt fell into the hands of Teutonic invaders, but the interior was strongly defended on all sides. The Weald forest to the east, and to the north the high downs, thickly wooded on both slopes, and further strengthened by the Kennet and the Emborne, formed natural boundaries between which the important stronghold of Silchester commanded the natural entry from the Thames. North of the New Forest, the hill-forts in central Hampshire and across the border towards Salisbury, constituted a second line of defence if once Winchester was passed. The long lines of ditch and rampart that are still to be seen in many parts of the country appear at the present day anything but serious obstacles, and it is difficult to see how they could ever have been adequately manned to resist a hostile advance. Leaving out of the question the feats of Roman engineering known as Graham's Dyke and the North Wall, it is obvious that the Wansdyke, or the Dyke of Offa, would never have been constructed if the system had not already proved successful, and such an eminent authority as General Pitt-Rivers has pointed out how even a modest earthwork like Bokerly Dyke, between Wilts and Dorset, could have been rendered an effective barrier by natural means; and a parallel instance is to be found in Hampshire itself. The Devil's Dyke, east of Andover, whatever the date of its construction, was evidently intended to bar progress along the road from Silchester, and that it effected its purpose is probable from the existence of what are now known as Dale's Wood and Harewood Forest on its flanks.

In the picturesque pages of the *Making of England* occurs a description of the natural features that seem to have had such an important bearing on the county history. The Andredswald, the northern escarpment of the downs overlooking the Forest of Bearroc, the fortress of Sarum, and the impassable woodlands of the coast, are there supposed to account for thirty years' inaction on the part of Cynric and his followers, who settled round their central 'tun' of Hampton, on the coast, and were content to leave the ruins of Winchester silent and deserted in the upper downs.<sup>1</sup>

The picture has its defects. Had the Saxons advanced far enough up the Itchen to lay Winchester in ruins, it is surely inconceivable that they would have returned to the swamps of Southampton Water, instead of making use of the other Roman roads that meet at this break in the downs. It would be out of place here to enter into details of alleged campaigns on the borders of Hampshire at this early date, but a perusal of the chapter just referred to will make it clear how much more effective

<sup>1</sup> Vol. i. chap. iii. pp. 103-105 (1897).



## ANGLO-SAXON REMAINS

the natural defences of the county would be against an enemy advancing from the north. The branching of the Roman road from Cirencester to Speen and Silchester on the one hand, and to Marlborough and Andover on the other, itself shows the intractable character of the northern heights, which were supposed by Mr. Green to have been the salvation of this part of Wessex till the coming of the Danes.<sup>1</sup> And, in the last resort, the hill-forts with which the county is studded, though useless to prevent invasion, would serve as temporary refuges for the inhabitants, and render the occupation of the valleys by the enemy a difficult and dangerous proceeding.

The present name of the county occurs first in the Chronicle under the year 755, and the entry reveals a distinct province, the limits of which, there is little reason to doubt, coincided approximately with those now recognised. It has often been pointed out that in the south of England the counties mark the extent of ancient kingdoms, provinces, or tribal settlements. That Sigeberht was allowed to retain Hampshire may be partly explained by its comparative security, while men of action and character were called away to face the Britons in the west; but partly also by a lingering regard for the rights of succession, for, as lord of Hampshire, the offending monarch would still retain his ancestral throne, even if the bulk of Wessex were in other hands.<sup>2</sup>

Some light is thrown on the probable origin of the county boundaries by earthworks and natural features, as well as by a few place-names which seem to preserve fragments of history. The tradition of a battle at Charford, on the Wiltshire border, is reasonable in itself, and is confirmed by the existence of a boundary-ditch or Grim's Dyke, as well as villages called Britford and Bridmore<sup>3</sup> in the vicinity. It is probable therefore, in spite of the alleged West Saxon victory of the Chronicle, that the Britons long retained this ford in the face of invaders from the south; while the dyke, which consists of a mound with a ditch to the south, does not fall in with Dr. Guest's scheme of Belgic ditches, all of which appear to face inland.<sup>4</sup> At what time the earthwork was raised may still remain a question, but it has apparently served as a boundary for fifteen centuries.

To the south-west the fastnesses of Dorset may explain why the Avon Valley was fixed upon as the limit in this direction, while the higher western border seems for the most part to depend on the water-parting of the Avon and Test basins. In primitive days the need for easy access to the water-supply confined the bulk of the population to the river valleys, and the watershed thus became a march or neutral zone without the intervention of diplomacy. The border diverges from this line to include in Wiltshire the barren heaths about Bramshaw, which apparently formed the northern march of the Jutish settlers in the

<sup>1</sup> *Conquest of England*, vol. i. p. 113 (1899).

<sup>2</sup> Kemble, *Saxons in England*, vol. ii. p. 219.

<sup>3</sup> Gen. Pitt-Rivers, *Excavations in Cranborne Chase*, vol. i. p. xvi.

<sup>4</sup> *Origines Celticae*, vol. ii. pp. 150, 201.

## A HISTORY OF HAMPSHIRE

New Forest ; and again in the north, where some miles of the Bourne Valley are annexed to Hampshire. The boundary in this case runs more or less parallel to a ditch that may have been the eastern limit of a neighbouring tribe.

The county is defined to the north by the Emborne River, which would replace the escarpment of the downs as a boundary as soon as the intervening woodland was cleared. Further east, the line of the Roman way from Staines and then the Blackwater form natural frontiers, while from Aldershot to the coast the line seems to have depended on the successive clearings of the Andred Forest, and in this connection the shrinkage in the neighbourhood of the Meon Valley may be significant.

Attention has been already directed to the need for caution in drawing conclusions from fragmentary data, and there is room for still more diffidence in treating such a subject as the early history of Hampshire on general grounds. But it will, in the first place, assist the argument to observe that geographically Hampshire belonged at that period to the south-west, and was as plainly shut off from the north and east as it was open to Wiltshire on the west. Another link with the south-west of Britain is discovered in the grouping of the counties according to the comparative numbers of serfs in the population at the time of the Domesday survey. From this point of view Hampshire stands in sharp contrast with Sussex, and in a lesser degree with Surrey and Berks, but agrees closely with Dorset, Wilts and Somerset ;<sup>1</sup> and it is not unreasonable to connect the frequency of the servile class with political events that had in the past uniformly affected a large and well-defined British area. To the east lay the district characterised by the Germanic silver coinage ; and it is significant that 'the sceattas were not first struck in Wessex, and in fact were known for a hundred years in Kent before they extended beyond the Southampton Water.'<sup>2</sup> It is proved from literary sources that the Britons held out for centuries against Wessex in the south-west, and that Glastonbury, for instance, did not pass into Saxon hands till between 652 and 658, when there was still existing at that place a religious house of British origin.<sup>3</sup> It seems obvious that progress from Hampshire as a centre would have been easier westward than across the Thames, yet the Midlands were occupied much earlier by the West Saxons. And it is interesting to note the comparative richness of Hampshire and parts of Wiltshire in remains that show a Roman influence, and in the same area a corresponding dearth of relics of the pagan Saxons. The contrast may be accidental, but till proved to be so, is of some historical importance.

The reconstruction of the early Anglo-Saxon history of Hampshire, as suggested by its remains, has proceeded mainly on theoretical lines, and it is satisfactory to find that the more tangible results of archæology do not conflict with the views already advanced. It was at some time in the seventh century, when the two races were in process of fusion, that

<sup>1</sup> See map facing p. 86 of Seebohm's *English Village Community*.

<sup>2</sup> C. F. Keary, *Coinages of Western Europe*, pp. 120, 121.

<sup>3</sup> Haddan and Stubbs, *Councils, etc.*, vol. iii. p. 164.



## ANGLO-SAXON REMAINS

there were deposited on the royal estate of Crondall, which Alfred afterwards bequeathed to his nephew, a hoard of 100 gold coins of various dates and mintages, together with some distinctively Teutonic jewellery.<sup>1</sup> The find was made below the turf on Ewshott Heath in the year 1828; and while the pair of triangular personal ornaments, incrustated with slabs of garnet, point to the wealth or high position of their original owner, the coins are yet more eloquent as to the condition of Britain in the first half of the seventh century. Not only does the latest coin approximately fix the date of deposit, but the discovery affords evidence that miscellaneous coins from various mints were in circulation at least till the spread of the Gospel in the south-west. The metal of the coins also points to a connection between the people of this district with the Roman civilization that filtered through Gaul, where the Merovingian kings were still in power. The peoples of Germany, on the other hand, had adopted a silver currency, and the earliest coins struck by them in Britain were the small pieces called sceattas, which do not appear before the Anglo-Saxon kingdoms had emerged from comparative barbarism under the influence of Christian bishops and princes.

In the fifth century the old Roman coins, or British imitations of them, were current, and some time in the seventh Germanic silver took the place of the rarer metal; while the intervening years are spanned by such discoveries as the Crondall hoard and the small but important group of gold coins in the British Museum and elsewhere, which recall the Roman pieces so long familiar to the Britons, and appear to issue in some cases from a mint at Winchester, as one bears the legend 'Venta' in Roman letters.<sup>2</sup> The appearance of the names of Abbo and his famous pupil St. Eloi as moneyers on pieces in the Crondall hoard indicates a connection with the Frankish kingdom that may or may not have been of political importance.

Discoveries made at Southampton<sup>3</sup> are not in themselves conclusive, but are interesting as having been made on a Romano-British site that almost certainly passed into Jutish hands early in the fifth century. In the year 1849 relics of this period were met with in the parish of St. Mary's, north-east of the town, on the bank of the Itchen nearly opposite the site of the Roman station at Bitterne. A field was found to be perforated in all directions by large round holes, the mouths of which were about two feet below the existing surface. They were six or seven feet deep, from four to ten in diameter, and about twelve feet apart. After the removal of the clay, these pits had been filled with all sorts of rubbish, including bones and teeth of various animals, such as deer, oxen, horses, sheep, and pigs, together with boars' tusks in great numbers, oyster-shells, and fish-bones large and small. Many tons of this refuse

<sup>1</sup> The find is described and figured in *Numismatic Chronicle*, vol. vi. p. 171 and (New Series) vol. x. p. 164, pll. xii. and xiii. Akerman's *Remains of Pagan Saxondom*, pl. xxxiii.

<sup>2</sup> *Annuaire de Numismatique*, 1883, p. 335; cf. H. H. Howorth, *Numismatic Chronicle*, 3rd series, vol. xiii. p. 263.

<sup>3</sup> The following description is abridged from Roach Smith's *Collectanea Antiqua*, iv. 58; also *Journal of British Archaeological Association*, vol. xiii. p. 207 and vol. xvi. p. 333.

## A HISTORY OF HAMPSHIRE

were removed from the field and sold to bone-dealers. Several Saxon coins and other remains were found in the rubbish, including about half a dozen sceattas, pennies of Offa, Coenwulf, Burgred, Ceolwulf, Plegmund, Edward the Elder, Aethelstan, Edmund, Edred, Edgar, and some doubtful pieces. Several iron and bronze keys are further said to have been found there, and are figured in the principal account of the discovery ; also some yellow-metal spoons with ornamented heads, and, near the remains of a skeleton, a vase of green glass resembling some found in Jutish graves in Kent.

The most remarkable objects in this discovery are the spoons and fork, objects very rarely met with in the burials. There are in the British Museum a rude bone-handled fork found near Salisbury in a Saxon grave, and a silver fork and spoon also found in Wiltshire, with coins of the ninth century ; but the Southampton specimens, which are of silvered bronze, bear the closest resemblance to an ordinary Roman pattern, and if of the period indicated by the coins, are an interesting survival.

Nine years later a continuation of the pits described above was discovered 150 yards away, but in this case they were apparently rectangular, of similar dimensions. Several were met with in a space of eighteen yards by ten at the corner of St. Mary's Road, and among the bones that were removed, nearly a ton in weight, were found perforated bricks or tiles and fragments of Anglo-Saxon pottery. The conclusion drawn at the time was that the town of Southampton originally stood on this site, but during the Danish invasions was moved for greater security about half a mile to the south-west. In 1860 further discoveries of a similar character were reported in the same neighbourhood, and besides a penny of Offa, Roman coins of Constantine I. and II. came to light.

The excavations in each case were of necessity imperfectly watched, and the record is in many ways unsatisfactory. There are traces of two distinct civilisations, but whether the remains belong altogether or principally to the ninth and tenth centuries cannot now be determined.

The accession of Ecgberht marked a great step in the founding of England ; and the royal city of Winchester, which at once rose into paramount importance as his capital, remained the political centre of the realm at least till the time of Canute, who was buried with his family in the old Minster. The struggle that now began with the Danes taxed all the resources of Wessex and her kings, and the fyrd or militia of Hampshire were always to the fore in the defence of the south. The shire that had successfully withstood all attacks from Mercia and lesser kingdoms in the past was now to be overrun by marauders from beyond the sea. It was in 837 that the Northmen dealt their first blow at Hampshire, and the Danes, who followed them about thirty years later and harried the land for about a century and a half, have left many place-names in the county as traces of their presence. Of other remains it would be hard to speak with certainty, but there is nothing improbable in the generally accepted view that one of their flat-bottomed boats now



## ANGLO-SAXON REMAINS

lies a wreck in the mud of the Hamble River near Swanwick.<sup>1</sup> Originally it was at least 130 feet long, and was caulked with moss; its ribs, which measured about fourteen inches by twelve, were four inches apart, the intervals being filled with some kind of cement, while the planking consisted of three thicknesses of oak, fastened with iron bolts. The figure-head, a griffin, is said to have been preserved for some time in a cottage at Bursledon, but has now been lost. Tradition tells of a similar discovery at Southampton in 1849, and it may be that in such galleys as these the pagan host vexed Alfred, whose enterprise is shown in his efforts to raise a fleet of vessels full-nigh twice as long as the enemy's, swifter, steadier, and higher, some with sixty oars and some with more.

Further inland, probably on the site of Hyde Abbey, has been found an enamelled brooch, which is now in the museum at Winchester. Its attribution to the Danes is based on its practical identity with one in the national collection that was discovered, together with a bone comb of Scandinavian or Danish type, in a barrow at Cambois, near Bedlington, Durham, by Canon Greenwell. A comparison of the two puts it beyond question that they are from the same model, but the Winchester specimen is further from the original and is somewhat debased in consequence. The disc is of bronze, nearly one and three-quarter inches in diameter, with a wide border ornamented in relief, the centre having the figure of a bird holding in its beak a branch, and the ground being filled in with enamels of various colours.

A stirrup of similar date and origin has been found in a peat bog at Mottisfont, near Romsey.<sup>2</sup> It is of bronze and resembles those now in use, except that at the top, where in modern specimens is a loop, there is a quadrangular plate pierced for attaching the strap. On the front of this plate are represented two serpentine monsters facing each other and twisted upon themselves, but the silver wire with which the design was originally traced has now almost entirely disappeared, only the empty lines remaining.

Of more strictly Saxon workmanship is a gold ring ornamented with filagree work which came to light in a meadow at Bossington, near Stockbridge, where a labourer noticed it glittering in some peat.<sup>3</sup> On the oval bezel, which measures one and a half inches in length, is the bust of an ecclesiastic in profile, and in the border a Christian inscription, NOMEN EHLLA FIDES IN CHRISTO in an abbreviated form. This interesting relic appears to date from the ninth century, and is preserved in the Ashmolean Museum at Oxford.

Hampshire, however, has yielded a Saxon relic of the Christian period that belongs to a very small class, and is specially interesting as having belonged to an historical personage whose identity is practically established. The seal of Aelfric (fig. 16) was found in 1832 by a labourer in cutting away a bank by the side of the road leading from Winchester to

<sup>1</sup> Described in *Hampshire Notes and Queries*, vol. iv. p. 55.

<sup>2</sup> Figured and described in *Archæologia*, vol. l. p. 533.

<sup>3</sup> Figured in *Journal of British Archæological Association*, vol. i. p. 341.

## A HISTORY OF HAMPSHIRE

Stockbridge, about three-quarters of a mile from Winchester, in the parish of Week. It is of bronze, and bears on the obverse the bust of an official personage, evidently of high rank, with the face in profile. His cloak or robe is similar to what may be seen on many of the Anglo-Saxon coins of this period; for example, some of Aethelred II., where the same fillet, diadem, or head-dress appears. In the right hand is a sword, which as a badge of authority limits the choice among the many Aelfrics that occur in history or in land-charters of the time. The Latin legend SIGILLVM ÆLFRICI, the seal of Aelfric, runs round the edge, with a monogram inserted to fill up the space, and on the back (fig. 15) is an elegant floral design that was perhaps suggested by the cross fleury of the coinage; while there are evident traces of the seal having been subsequently worn as a brooch.

The use for such a seal is uncertain; and as the original charters witnessed by one or another Aelfric do not preserve impressions, it is unlikely that seals were attached to deeds before the time of Edward the Confessor, though they may have been used for sealing jars, boxes, or other depositories. Since this discovery was published in 1832,<sup>1</sup> the close and patient analysis of Anglo-Saxon charters has necessitated an alteration in the attribution of this interesting object. The Earl of Mercia and the Alderman of Hampshire were confused in the original account; but the locality of the seal being so close to Winchester, in the heart of the Aldermanry, goes a long way towards deciding between the two Aelfrics in question. We cannot be far wrong in referring the seal to Aelfric of Hampshire, who commanded the fleet of Aethelred in 992 at London and by treachery saved the Danish host; who in 1003 gathered the forces of Hampshire and Wiltshire, professedly in support of Aethelred, against Sweyn, but, pretending sickness, betrayed the army which he ought to have led, into the hands of the Danes; and who was slain at Ashington in 1016.<sup>2</sup>

Apart from those already mentioned, the minor relics of later Saxon times are in Hampshire, as in other counties, rare. The records, on the other hand, had by this period grown more explicit, and within the borders of Hampshire there is no lack of monuments to tell of progress both in Church and State.

<sup>1</sup> *Archæologia*, xxiv. 359.

<sup>2</sup> Napier and Stevenson, *Crawford Charters*, p. 121; Earle and Plummer, *Two Parallel Chronicles*, vol. ii. p. 170.



# DOMESDAY SURVEY

THESE is no county in all England so closely connected as Hampshire with that great national record known as Domesday Book, which was compiled from the returns to the Conqueror's famous Inquest in 1086. For the only name which Domesday Book gives itself in its own pages is that of 'the book of Winchester' (fo. 332b). It was at Winchester that Domesday Book was kept; at Winchester that it must have been compiled; and at Winchester that the lost original returns were preserved, far into the next century, in the Treasury of the Norman kings.<sup>1</sup> The distinction between the Survey itself, which was carried out Hundred by Hundred, and Domesday Book, which contains only (except for the three eastern counties) abstracts of that Survey rearranged under the names of the tenants-in-chief, is one that has been often overlooked. It is desirable, therefore, to insist upon the fact that the Survey itself, as contained in the returns, was officially styled 'Descriptio,'<sup>2</sup> while the 'book' compiled for the use of the government, from those original returns was styled 'the book of Winchester,' 'the book of the Treasury,' 'the book of Judgment,' or simply 'Domesdei.'<sup>3</sup>

The belief in an earlier Domesday, an older 'Book of Winchester,' is hard, it seems, to kill. Indeed, as it has found expression in a somewhat authoritative quarter, one can hardly pass it by. We are told of Alfred that

<sup>1</sup> 'Hæc omnia in cartis scripta delata sunt ad regem et, inter thesauros reposita, usque hodie servantur'—*Henry of Huntingdon*.

<sup>2</sup> 'Anno millesimo octogesimo sexto ab incarnatione Domini vigesimo vero regni Willelmi facta est ista descriptio,' etc.—Colophon to Domesday, Vol. II. In Vol I. the Survey is spoken of as 'hæc descriptio' on fos. 3, 252, 269.

<sup>3</sup> This distinction is well seen in the very important section of the 'Dialogus de Scaccario' headed 'Quid Liber Judiciarius, et ad quid compositus.' We there read that the Conqueror, 'communicato consilio, discretissimos a latere suo destinavit viros per regnum in circuitu. Ab hiis itaque *totius terræ descriptio diligens facta est*, tam in nemoribus, quam in pascuis et pratis, necnon in agriculturis, et verbis communibus *in librum redacta est*; ut videlicet quilibet jure suo contentus, alienum non usurpet impune. . . . Hic liber ab indigenis Domesdei nuncupatur, id est, dies judicii per metaphoram; sicut enim districti et terribilis examinis illius novissimi sententia nulla tergiversationis arte valet eludi: sic cum orta fuerit in regno contentio de his rebus quæ illic annotantur, cum ventum fuerit ad librum sententia ejus infatuari non potest vel impune declinari. Ob hoc nos eundem librum judicarium nominavimus,' etc.

## A HISTORY OF HAMPSHIRE

he is said to have collected facts at Winchester from every quarter, which he embodied in a first 'Liber de Winton,' the earliest Domesday Book. This register, it is recorded, was kept among the royal archives of Winchester, until, rendered useless, as men thought, by William's more complete royal Roll, it was lost or destroyed.<sup>1</sup>

The authority for these statements is the famous forgery of Ingulf. But even before it had been discovered that Ingulf's work was forged, the alleged Survey had aroused the doubts, we find, of Ellis :—

Ingulphus affirms that this Survey was made in imitation of the policy of Alfred, who, at the time he divided the kingdom into Counties, Hundreds, and Tithings, had an Inquisition taken and digested into a Register, which was called, from the place in which it was repositied, the Roll of Winchester.

The formation of such a Survey, however, in the time of Alfred, may be more than doubted; as we have only a solitary authority for its existence, and the most diligent investigation has not been able to recover, among the Records either of the Saxon or of later times, the slightest indication that such a Survey was ever known.<sup>2</sup>

After giving further reasons for doubting Ingulf's statement, Ellis referred to Kennet's view :—

King Alfred . . . had an inquisition taken of the several districts, and digested into a register called *Dom Boc*, i.e. the judicial or judgment book, deposited in the church of Winchester, and thence entitled 'Codex Wintoniensis.' . . . The general Survey taken by King William the Conqueror was after the precedent of King Alfred, and seems a corruption of, or rather an addition to, the same name *Domboc* into *Domesday Book*.<sup>3</sup>

On Kennet's view Ellis comments :—

This may, perhaps, serve as a clue to the explanation of the whole. They who were familiar with the name of Domesday (and it was the common appellation for the Conqueror's Survey among the English) considered that the 'Dom-boc' of Alfred, being synonymous, was intended to designate the same kind of Register; whereas the 'Domboc' was in reality the code of Saxon Laws (p. 11).

It cannot be too emphatically observed that Alfred's alleged Domesday Book, whether spoken of as the 'Dom-boc,' or by any other name, rests solely on the evidence of the forged work of 'Ingulf,' and is wholly unknown to history.

The fact that the seat of government, with the Treasury and its necessary officers, was at Winchester under the Norman kings, as it had been before the Conquest, is one that is reflected in the Hampshire Domesday, and that receives in turn valuable illustration from the pages of the great record. But before dealing with this feature, historically

<sup>1</sup> *Winchester*. By G. W. Kitchin, D.D., F.S.A., Dean of Winchester. (Ed. Prof. E. A. Freeman, and Rev. W. Hunt, 1890.)

<sup>2</sup> *Introduction to Domesday* (1833), I. 10.

<sup>3</sup> *Glossary to Parochial Antiquities* (Vol. II.). It was evidently under this impression that Mr. Bawdwen produced, in 1809 and 1812, his 'Domboc: A Translation of the Record called Domesday,' for several counties. It was also urged in *Domesday Studies* (1891) by Mr. Hubert Hall (of the Public Record Office, Director of the Royal Historical Society) that among the 'official records' preserved at Winchester was probably 'the standard work of Alfred known as the Domboc' (p. 523), which he had described in the *Athenæum* (No. 3083) as 'a Domesday (Domboc) of Alfred and designated as Rotulus Wintoniæ,' to which 'Ingulphus' refers.



## THE DOMESDAY SURVEY

among the most important of the local Survey, it is desirable that we should ask what light its entries can be made to throw on the institutions of an earlier time.

In Hampshire, as in three other counties of the old kingdom of Wessex—Dorset, Somerset, and Wilts—Domesday shows us an archaic system in the act of passing away. This was the grouping of certain manors to form a unit, from which the king received a fixed rent in kind. Such a rent was known as a *firma unius diei* or *firma unius noctis*, from the Anglo-Saxon word *feorm*. The best illustration, in Hampshire, of this system is that which is afforded by the three manors of Basingstoke, Kingsclere, and Hurstbourne Tarrant in the north of the county. Domesday groups the three together, and observes: ‘Hæc tria maneria, Basingestoches, Clere, Esseborne, reddunt firmam unius diei.’ In this instance the ‘ferm’ is spoken of as if the system was still in force; but in the others we obtain a money value. Of Barton Stacey (fo. 38*b*) we read: ‘De firma regis Edwardi fuit, et dimidiam diem firmæ reddidit in omnibus rebus . . . T.R.E. valebat [£38 8*s.* 4*d.*] et post tantundem. Modo valet [£33] et tamen reddit [£52 6*s.* 1*d.*].’ So too, on the same folio, we read of Eling: ‘Hoc manerium reddidit dimidiam diem firmæ tempore regis Edwardi . . . T.R.E. valebat [£38 8*s.* 4*d.*], et post similiter. Modo [£20] et tamen reddit [£52 6*s.* 1*d.*] cum illis rebus que cadunt in foresta.’ It is obvious that the identity of the sums paid by these two manors (the only ones in Hampshire recorded to have been liable for half a ‘ferm’) at the time of the Survey cannot be accidental. The inference to be drawn from that identity is, probably, that the two manors were jointly liable for a whole ‘ferm,’ and that when the sum exacted from the two was raised to £104 12*s.* 2*d.*, each of them was made liable for a half of that total. But, in any case, the entries for these manors imply that in Hampshire a whole ‘ferm’ was reckoned under Edward the Confessor at £76 16*s.* 8*d.* With this clue we are enabled to detect two manors which must have been liable before the Conquest, for a whole ferm. These were Neatham (fo. 38), which ‘T.R.E. et post valuit [£76 16*s.* 8*d.*],’ and Broughton (fo. 38*b*), which ‘T.R.E. et post valuit [£76 16*s.* 8*d.*].’ But we can clinch the proof. Just as Eling and Barton Stacey had, we saw, their joint liability raised from £76 16*s.* 8*d.* to £104 12*s.* 2*d.*, so we find that of Broughton raised from £76 16*s.* 8*d.* to £104 12*s.* 2*d.*<sup>1</sup> Here again the identity of the sums cannot be explained as a mere coincidence; and when we find that in the neighbouring counties of Wilts and Dorset the money ‘value of the *firma* was about £105,’<sup>2</sup> we may fairly infer that the Normans had been levelling up that of the Hampshire *firma* to about the same amount.

Domesday, as we saw, does not mention the money value of the *firma* due from the Basingstoke group; but by good fortune the Hundred Rolls (II. 220) preserve the return to a sworn inquest (June, 1274), in which

<sup>1</sup> ‘Modo [valet] lxvi libras et tamen reddit de firma ciiii libras et xii solidos et ii denarios.’

<sup>2</sup> See my *Feudal England*, p. 112.

## A HISTORY OF HAMPSHIRE

the jurors state that five Hundreds 'were wont to belong to the manor of Basingstoke and to the *firma* of the town, for which, together with the manor of Basingstoke, the sum of £104 12s. was yearly paid into the king's Exchequer, and for these Hundreds there has been deducted £24 12s. from the annual payment paid to the Exchequer, inasmuch as the farmers of Basingstoke now only pay £80 yearly to the Exchequer, whereas they formerly paid £104 12s.' Here we have the very same sum<sup>1</sup> that represented, we saw, in Domesday the money value of a 'day's ferm,' the *firma unius diei* in Hampshire. But, more than this, we learn that the said *firma* comprised the profits of six Hundreds (adding that of Basingstoke itself). Now it is a singular fact that, on the opposite page of Domesday, we read of Wallop that 'to this manor belonged T.R.E. the third penny of six Hundreds.' From this we may infer that the third penny of (the profits of the courts of) six Hundreds<sup>2</sup> was similarly annexed to the royal manor of Basingstoke, head of its group.<sup>3</sup> In the same way the (profits of) the pleas of two Hundreds were among the sources of the ferm due from Malmesbury.<sup>4</sup>

The antiquity of the 'day's ferm' system is well shown by the striking fact that the manors on which it is found had never been assessed in 'hides.' We know now that the 'hide' of Domesday was not, as used to be generally believed, a fixed area of land, but a unit of assessment bearing no fixed relation either to area or to value. The Hampshire manors discussed above afford a valuable illustration of the truth of this discovery.<sup>5</sup> Thus, Basingstoke 'nunquam geldum dedit, nec hida ibi distributa fuit'; at Clere the jurors 'numerus hidarum nescierunt'; and at Hurstbourne 'numerus hidarum non habent.' At Broughton 'de hidis rationem non dederunt'; at Neatham 'quot hidæ sint ibi non dixerunt.' The jurors were also at a loss at Eling, where 'numerus hidarum nesciunt'—the reason being given in the case of the sister manor of Barton: 'Nunquam in hid[is] numeratum fuit. . . . Numerus hidarum non dixerunt.' Therefore, when at Andover also we read: "De hidis numerum non dixerunt," we may fairly conclude that the cause was the same, although the omission of any record of its value, which is one of the imperfections by which the Hampshire Domesday is somewhat strangely characterized, deprives us of the usual proof. At Wymering, precisely in the same fashion, we are told that it 'nunquam hidatum fuit' (fo. 38), and that a portion of this manor which lay in Porchester 'nunquam hidata fuit'; but the value of these estates is not recorded. Rockbourn is yet another manor of which we read that king Edward held it, and that 'nunquam geldavit nec hidata fuit' (fo. 39), but of which the value is not given. Lastly, we find King's

<sup>1</sup> The jurors doubtless ignored the 2d.

<sup>2</sup> A valuable map of these Hundreds is prefixed to the *History of Basingstoke* (Baigent and Millard).

<sup>3</sup> Compare also Eyton's *Dorset Domesday*, p. 81.

<sup>4</sup> 'In hac firma erant placita Hundret' de Cicem'tone et Sutelesberg que regi pertinebant' (D.B. I. 64b).

<sup>5</sup> See my *Feudal England*, pp. 109–110.



## THE DOMESDAY SURVEY

Sombourn styled, like Basingstoke, 'regale manerium,' and learn that it was never assessed in hides,<sup>1</sup> but are not told what its value was, though the manor, we read, lay 'in dominica firma regis.'

The Hampshire estates held by the king may be roughly divided into two classes : (1) those which had belonged to Edward the Confessor ; (2) those derived from other sources. The former class, which was subsequently known as the 'ancient demesne' of the Crown, must again be subdivided. For, in addition to the manors discussed above, which had never been assessed in hides, it comprised another class of manors, which had, on the contrary, been so assessed. Such, it would seem, on the mainland, were Meonstoke with Tichfield, Twynham, Lyndhurst, and Burgate, and, in the Isle of Wight, Sandford with Week, Arreton, and Bowcombe ('Carisbrooke.'<sup>2</sup>) Of Yaverland, in the Isle, we read : 'Non fuit hidata.' The system of assessment in hides was, it is now recognised,<sup>3</sup> of very great antiquity, so that the fact that certain manors in Hampshire, as in Dorset and elsewhere, had never been so assessed, proves that the groups to which they belonged, and which paid a fixed rent in kind, were of very early formation.

Now that we understand the meaning of the Domesday 'hide,' the assessment of which it is the unit is receiving careful study ; for it preserves the traces of a primitive system, although reductions of assessment by the Crown, as an act of special favour, have in many cases obscured that system by arbitrary alteration. The Hampshire Domesday is rich in cases of such action by the Crown. In one instance of special interest it is recorded that the Crown had reduced the assessment of the episcopal manor of Fareham from thirty hides to twenty, 'on account of the Wikings, because it is on the coast.'<sup>4</sup> Portsmouth harbour had doubtless proved a tempting resort for the Norse pirates. Indeed we know from the touching letter of bishop Denewulf of Winchester, at the beginning of the tenth century, that the New Minster's manor of Bedhampton, which lay, in like fashion, at the head of Langstone harbour, had been laid waste by these heathen.<sup>5</sup>

In this reduction of assessment at Fareham there are two points to be noticed. The first is the formula 'Tamen sunt numero xxx hidæ.' This formula does not imply that there were thirty areal hides, but that the manor had been assessed, previously, at thirty hides. The very first manor in the Hampshire Domesday affords another illustration ; '(there are) there,' we read of Odiham, '78½ hides. It was then' (when earl Harold held it) 'assessed at 38 hides. Now it does not pay geld.'<sup>6</sup>

<sup>1</sup> Domesday reads oddly, 'sed non fuit per hidas distributum,' which seems erroneous.

<sup>2</sup> See below p. 408.

<sup>3</sup> Maitland's *Domesday Book and Beyond*.

<sup>4</sup> T.R.E. et modo se defend[ebat] pro xx hidis. Tamen sunt numero xxx hidæ. Sed Rex E. ita donavit causa Wichingarum, quia super mare est' (fo. 40b).

<sup>5</sup> 'When my lord first let it to me, it was unprovided with cattle and laid waste by heathen folk ; and I myself then provided the cattle, and there people were afterwards.'—Thorpe's *Diplomatarium*, p. 162.

<sup>6</sup> 'Ibi quater xx<sup>ti</sup> hidæ una hida et dimidia minus. Tunc se defend[ebat] pro xxxviii hidis. Modo non geldat' (fo. 38).

## A HISTORY OF HAMPSHIRE

Again, of Crondall, a great manor belonging to the Old Minster, we read that 'there were there 50 hides in the time of king Edward, and then, as now, they paid geld for 40 hides.'<sup>1</sup> In such cases Domesday means, by the phrase 'there are,' not the existence of areal hides, but the figure at which the assessment had stood.'<sup>2</sup> This remark applies to the entry on the Bishop's manor of Waltham: 'T.R.E. et modo se defend[ebat] pro xx hidis quamvis sint ibi xxx hidæ numero' (fo. 40). We may note that on another Hampshire manor Domesday makes its meaning clear by using the peculiar formula: "Ibi habebantur v hidæ; sed tunc et modo se defend' pro iii hidis" (fo. 50b). The second point to be observed in the Fareham entry above is the mention of the Crown's action. We meet with this again at Alverstoke, where Domesday records that 'T.R.E. se defend[ebat] pro xvi hidis et Rex Edwardus condonavit ut esset pro x hidis, et ita est modo' (fo. 41b). In the adjacent county of Berkshire we find a similar remission on a manor held by monks: 'fuit pro xv hidis, sed Rex Edwardus condonavit pro xi hidis, ut dicunt' (fo. 58b). Here, it will be seen, a doubt is expressed as to the authenticity of the remission, and in the case of a Hampshire manor we find it openly challenged. For of Hartley Mauditt Domesday observes: 'Tunc se defend[ebat] pro vi hidis, et postea pro iii hidis, sed comitatus non vidit inde breve vel sigillum regis' (fo. 47b). The loss to the revenue through this practice must have been becoming serious on the eve of the Norman Conquest, and one cannot wonder that, under William, its spread was jealously watched, especially as there is reason to believe that the Norman grantees endeavoured to diminish, if not to evade, the obligations of their estates to the Crown. Of these the chief, under the old system, was the payment of the 'geld,' or land-tax, but a chance entry on a Hampshire manor implies that it did not stand alone. We read of 'Celtone' (Chawton): 'Ibi erant x hidæ, sed rex Edwardus misit ad *servitium* et geldum pro iiii hidis et una virgata' (fo. 45b). This manor, therefore, owed not only 'geld' but 'service' on the above assessment. To the same effect we read of Tewkesbury, that the payment for 50 hides made the whole number (85) 'quietas et liberas ab omni geldo *et regali servitio*' (fo. 163). These entries are of great value as pointing to a military service, calculated on the same assessment as the 'geld,' before the Norman Conquest.<sup>3</sup>

It is now generally recognised that the main object of the Survey was to ascertain the right assessments for payment of the 'geld' and to check its frequent evasion. Hampshire, as I have elsewhere observed,<sup>4</sup> is one of a group of four counties, in which the reduction of assessment is a curiously marked phenomenon. These counties are Sussex, Surrey, Hants, and Berks, and it would, perhaps, be wiser to attempt no explanation of this district

<sup>1</sup> 'Ibi fuerunt L hidæ T.R.E. et tunc et modo geldaverunt pro xl hidis' (fo. 41).

<sup>2</sup> Compare *Feudal England*, p. 109; *Domesday Studies*, p. 99.

<sup>3</sup> Compare *Domesday Studies*, pp. 120-121.

<sup>4</sup> *Domesday Studies*, pp. 110-112.



## THE DOMESDAY SURVEY

being so treated than to hazard an erroneous theory. In Cambridgeshire it is possible to prove reductions on whole Hundreds, in which the manors composing them shared *pro rata* ;<sup>1</sup> but in Hampshire we can trace no relation between the reduction and the Hundreds. All that can be said is that the reduction seems to be most marked on the manors held in demesne. On two great demesne manors of earl Roger of Shrewsbury, the assessment was reduced from 71½ hides to 31½, but on six manors held of him by lay tenants, the reduction was only from 18½ to 15½, and was restricted to one manor. On the two manors held in demesne by William de Eu there was a reduction from 34 hides to 18½ hides ; but the assessment of his remaining manor, which was held of him by Ralf Bloiet, remained unchanged. On the great fief of Hugh de Port twenty-two manors seem to have been held in demesne. On six of these there was no change ; but on the remaining sixteen there was a reduction, in all, from 99 hides to 45½ hides, although it varied on the several manors in the most erratic fashion. One of the effects of this reduction was to obscure hopelessly what is now known as 'the five-hide unit,' that is to say the primitive system of assessing manors, or groups of manors, in multiples of that unit. Many manors which, under the Confessor, had been assessed at five or ten hides, or some multiple of these sums, were assessed, after these arbitrary reductions, at some unmeaning fraction. As the process of reduction, which was still proceeding under Henry I., may, of course, have been begun before the days of the Confessor, it is quite possible that the 'five-hide' and 'ten-hide' manors would be more frequent even than they are if we had records of the time before these reductions had begun.

There was, however, in certain cases, a reduction of a different character, consequent on the actual loss, by a manor, of a portion of its area. Of this there are several instances in Hampshire, owing to land being constantly taken for enclosure in the king's forest. One of these deserves attention for the light it throws on a Domesday term. At Canterton, an Englishman's manor (fo. 50b), the woodland and meadow, representing four-fifths of the value, had been taken into the forest, and the assessment had therefore been reduced, though only by one-half : 'Tunc geldavit pro dimidia virgata ; modo<sup>2</sup> pro uno ferding ; aliud ferding jacet in foresta regis.' Here is proof that the ferding was one-fourth of a virgate, as the farthing is a fourth of a penny. A royal park in the Isle of Wight had similarly encroached on a manor belonging to Wilton Abbey.<sup>3</sup> But even a noble, in this respect, could follow the example of his sovereign. In his great manor on the Sussex border earl Roger of Shrewsbury had made himself a park, the existence of which is accidentally revealed by the entries of its encroachment on his neighbours' estates at Soberton. Their assessment was reduced in consequence.<sup>4</sup> At Caris-

<sup>1</sup> See *Feudal England*, p. 51.

<sup>2</sup> The scribe had written 'et' in error for 'modo.'

<sup>3</sup> T.R.E. se defendebat pro iii hidis modo pro ii hidis et dimidia, quia dimidia [hida] est in parco regis. . . . pratum est in parco (fo. 52b).

<sup>4</sup> 'Tunc se defendebat pro iii hidis. Modo pro ii hidis et dimidia quia in parco Rogerii comitis est dimidia hida' (fo. 49). See also the entry which follows it.

## A HISTORY OF HAMPSHIRE

brooke, again, we read that 'Alwinestune,' which had been assessed at  $2\frac{1}{2}$  hides, was now assessed at two, 'because the castle stands in one virgate.'<sup>1</sup> Before leaving the subject of the 'geld,' it may be observed that the Hampshire Domesday employs two phrases to express assessment. These are (1) 'se defendebat pro'; (2) 'geldavit pro.' Although the two are identical in meaning, it has been thought desirable, in translating the text, to render the first, 'was assessed at,' and the second, 'paid geld for' in order to retain that variety of expression which, it is important to remember, distinguishes Domesday Book.

Although, no doubt, primarily intended to secure the payment of the king's 'geld,' by setting the assessment on record, the great Survey of the Conqueror affords us a mass of information on other and, to most readers, more interesting subjects. It was part of his purpose to ascertain the names of those who held the land, and the annual value of their holdings. The former inquiry involved a record of disputed tenures, leading to much curious information, historical, personal, and legal; the latter necessarily proved of statistical and economic value. We must not expect to find in Domesday what it was not intended to contain; but we may often learn much from its incidental statements, and, above all, where its facts enable us to check the tradition or the chronicle, we may with confidence apply its virtually decisive test.

It will enable us to proceed in chronological order if, having glanced at the local traces of an almost archaic system, we next inquire what the Survey has to tell us of the early days of Norman rule.

The Hampshire Domesday illustrates the process by which so many of the fiefs bestowed on his followers by William were forfeited, by their owners' rebellion, in the course of the Norman period. Even before the Domesday Survey, this process had begun; and, by the irony of fate, it was the broad estates he had granted to 'his dearest friend' that, in this district of the realm, were the first to pass away. William Fitz Osbern, earl of Hereford and lord of the Isle of Wight, is already, on the pages of Domesday, an owner so forgotten, that of him and his disinherited successor we have but accidental glimpses, glimpses which, were it not for what we are able to glean from other sources, might well leave us wondering who and what they were. In his work on the Dorset Domesday, Mr. Eyton has observed that

Domesday, be it noted, gives us very little of those territorial changes which had intervened between the primary conquestual distribution of English lands among the Normans and the taking of the Survey. In Dorset the sometime ascendancy of Earl William Fitz-Osbern and of Ralf de Limesey are each suggested by a single hint (p. 88).

In Hampshire there is more than this; and yet, little enough. But if the lands held by the earl had passed away from his line, the gifts he had bestowed on the Norman abbeys of Corneilles and La Vieille Lyre preserved in Hampshire, as in other districts, the memory of his

<sup>1</sup> 'Tunc pro duabus hidis et dimidia. Modo pro ii hidis, quia castellum sedet in una virgata' (fo. 52b).



## THE DOMESDAY SURVEY

power. Twenty years before the Conquest he had founded on the Rille, not far from the seat of his power in Normandy, the Benedictine abbey of Lyre, of which the priory of Carisbrooke became a dependent house. Here, in later years, his wife found burial. Corneilles, also in the present 'Eure,' was founded by him only about six years before he became, in Mr. Freeman's words, 'the man who had done more than any other man to bring about the invasion of England.' From the English endowments of these abbeys, as entered in Domesday and later records, we may learn much as to the estates bestowed by the grateful Duke on 'his earliest and chiefest friend.'

There is a wild story that William Fitz Osbern conquered the Isle of Wight for himself when duke William conquered England. We trace it to a cartulary of Carisbrooke Priory, which contains, like many others, a 'progenies' of its founder. Now this 'progenies' is also the source of the statement that Richard 'de Redvers' obtained the lordship of the Isle as the nephew of William Fitz Osbern. As the latter statement is accepted by Dugdale, and as even Mr. Planché does not reject it, and holds indeed that Richard's lordship 'certainly gives some support to the assertion,'<sup>1</sup> it would seem desirable to examine critically the whole story. I append, therefore, a translation.

Memorandum that William the bastard, Conqueror of the land of England (*Anglicanæ*), had William Fitz Osbern (as) his marshal; and he conquered the Isle of Wight at the time that the said William the bastard conquered the land of England. And (the Conqueror) made the said William Fitz Osbern earl of Hereford. This William Fitz Osbern had two sons, John and Richard, who died in their father's lifetime; and after their death, and that of their father William, that inheritance descended to Richard de Rivers, nephew of the said William Fitz Osbern, (who was) then earl of Exeter. From this Richard it came to Baldwin his son, from whom, because he died without heir of his body, it descended to his sister Isabel, whom William de Fortibus married.<sup>2</sup>

Now William's sons were William and Roger, not John and Richard; and they did not die in his lifetime, but succeeded respectively to his lands in Normandy and England. Richard 'de Redvers,' therefore, even if William's nephew, could not possibly be his heir, for he left lineal descendants. This Richard, moreover, was not earl of Exeter; and his son Baldwin did not, as stated, die without issue, but was succeeded in the earldom by his heirs. Lastly, the above Isabel was not the sister of Baldwin, but was his lineal descendant several generations later. Consequently, we may safely reject the above narrative, which is even more untrustworthy than others of its kind.

Turning from this tale to the evidence of chronicle and record, we learn from Orderic that the king 'gave to William Fitz Osbern, steward (*dapifero*) of Normandy, the Isle of Wight (*Vectam*) and the earldom (*comitatum*) of Hereford.'<sup>3</sup> The writer gives us no clue as to when these gifts were made, but almost immediately after the Duke had obtained the

<sup>1</sup> *The Conqueror and his Companions*, II. 46.

<sup>2</sup> *Monasticon Anglicanum*, VI. 1040-1.

<sup>3</sup> Ed. Société de l'histoire de France, II. 218.

## A HISTORY OF HAMPSHIRE

crown, William appears as earl of Hereford.<sup>1</sup> He probably obtained about the same time the lordship of the Isle of Wight, for Orderic states that early in 1067, the king 'constructed a strong fortress within the walls of Winchester, a town eminent for its wealth and its defences, and there left William Fitz Osbern, a leader of his host, and appointed him to be over the whole kingdom, in his own stead, towards the north.'<sup>2</sup> The year after, when the king had returned to his island realm, and was holding, for the first time, his Easter court at Winchester, 'William the earl, son of Osbert,' attested, immediately after the king's brother Robert, a charter to the abbey of St. Denis, which was granted, 'during the celebration of mass, in the minster of St. Swithin.'<sup>3</sup> As the earl left England at the close of 1070, and met with his death soon after on his wild adventure in Flanders, he was not long connected with Hampshire or the Isle of Wight. Domesday, however, gives us these glimpses of his rule. Under Eling, it observes that two of its dependencies, which lay in the Isle of Wight, were held by 'earl William,' when that royal manor was entrusted to Hugh de Port. In its survey of the Isle itself, its only mention of the earl is that he gave his baker an acre and a half of land in the manor where his oven stood. Well might Orderic exclaim, as he records the earl's death, that 'the glory of this world fadeth, and withereth as the flower of the field; yea, it passeth away and vanisheth even as smoke.'

It is only in a very unlikely quarter, the Domesday Survey of Wiltshire, that we find evidence that William had held the valuable manor of Bowcombe in the Isle of Wight. Domesday there (64*b*) records that he had given the Crown, to form portion of its manor of Amesbury, three Wiltshire properties, which had been held by thegns, 'in exchange for Bovecombe,' or, as it goes on to say, 'in exchange for that land in (*de*) the Isle of Wight, which belonged to the ferm of Amesbury,' that is, which was a dependency of the royal manor of Amesbury. Why Bowcombe should belong to Amesbury it is impossible to say; but it is a singular fact that Lyndhurst did so also.<sup>4</sup> When we turn to the Hants Domesday, we find its entry on Bowcombe in striking harmony with the information that the Wiltshire Survey affords. Bowcombe ('Bovecome') had been 'de firma regis Edwardi,' and is the only manor in its group (52-52*b*) so described. Close examination reveals the fact that the three great barons of the Isle of Wight, at the time of Domesday, William the son of Stur, and Gozelin and William the sons of Azor, held each of them half a virgate (assessed value) on the manor. I claim, here as elsewhere, these 'small holdings'

<sup>1</sup> *The Commune of London and other studies*, p. 30.

<sup>2</sup> Ed. Société de l'histoire de France, II. 166-7.

<sup>3</sup> According to the original charter now preserved in the Bibliothèque Nationale, Paris.

<sup>4</sup> 'Jacuit in Ambresberie de firma regis' (39). It is remarkable also that the two manors immediately preceding Lyndhurst in the Survey, namely, Holdenhurst and Ringwood, which had been held by earl Tostig, included estates in the Isle of Wight. Indeed the bulk of the manor of Ringwood, far though it lay inland, was situated in the Isle of Wight, while Breamore, even further north, had appurtenant to it a hide in the Isle of Wight.



## THE DOMESDAY SURVEY

as evidence that the manor on which they are found was a seat of the chief lord. But in this case we have other evidence. It is expressly recorded that the monks of Lyre, William Fitz Osbern's abbey, held the church of 'Bovecome' with a mill, houses, and land, and all the tithes of the manor. This endowment was the nucleus of Carisbrooke Priory, Bowcombe being then the principal manor in what is now Carisbrooke. Here then William Fitz Osbern, as lord of the Isle of Wight, clearly had his chief seat. Following the clue afforded by the abbey of Lyre's endowments, we find it, in Domesday, holding at Arreton the church with land and tithes, at Freshwater three virgates, and in the island at large six unspecified churches, together with lands and villeins, besides the tithes of all the rents received by the king from the Isle. The above unspecified churches, entered in Domesday, included, as we learn from later evidence, Whippingham, New Church, Godshill, Niton, and Freshwater.<sup>1</sup>

These clues to the possessions of earl William Fitz Osbern are supplemented by later evidence. Thus the 'decimas de omnibus redditionibus regis,' which Domesday assigns to the abbey of Lyre, under the Isle of Wight, reappear in the charter of Henry II. (? 1155) for the abbey,<sup>2</sup> as 'quingenta solidos pro decimis numerorum domini de Insula.' Clearly, these tithes were originally those of the revenue received by William Fitz Osbern as lord of the Isle of Wight. But the king's charter does more than this: it further confirms to the abbey 'the church of Caresbrook with its appurtenances and the whole tithe of the earl's demesne,' the tithes, therefore, which are found, in the Carisbrooke cartulary, to belong to the abbey and its priory, are evidence of what manors had been held by William Fitz Osbern, before his fief, by forfeiture, had come into the king's hands. Again, the charter of Henry II. enumerates, among the benefactions of the earl, 'in Southampton (*Hantonia*) £9 5s., and one burgess, and the Church of St. John.' And his charter to the earl's abbey of Corneilles<sup>3</sup> confirms to it 'at Southampton (*Sudhamptunam*) £9 5s.; and, in the said town, its monks and the men of their demesne and their house are free and quit of all dues.' Domesday tells us nothing more, in its brief account of Southampton, than that the abbots of Corneilles and of Lyre hold, each of them, a house there free of dues. But these charters prove that William Fitz Osbern had bestowed on each of his Norman abbeys an endowment of £9 5s. a year from Southampton, which implies that there also he had revenues to bestow. Now in the Pipe Rolls of Henry II. we find this endowment (but as £9, not as £9 5s.) received by each of his abbeys, but entered, in the Southampton account, under the heading: 'De decimis constitutis.' It should be observed that they similarly received £12 a-piece, 'de decimis constitutis' from Herefordshire, earl William's county. This endowment, like the other, is

<sup>1</sup> Worsley, from the Carisbrook cartulary, in his possession. Shorwell church also was held by the abbey in 1305.

<sup>2</sup> *Monasticon Anglicanum*, VI. 1092.

<sup>3</sup> *Ibid.* VI. 1076-7.

## A HISTORY OF HAMPSHIRE

named in the charters of confirmation they respectively received from Henry II. Strictly interpreted, the pipe-rolls would imply that the £18 a year received by the abbeys from Southampton represented the 'tithe' of the revenue there received by the donor, William Fitz Osbern. But as this interpretation seems to be inapplicable in the case of Hereford, and as these endowments are not spoken of, in the above charters, as tithes, we can only say with confidence that earl William must have occupied a position which enabled him to charge the revenues of the town with this considerable yearly payment.

On the mainland, Domesday shows us that the earl was also in possession of Clatford, where his abbey of Lyre secured a further endowment in lands and tithes. Its church as well fell to the abbey, as we learn from the charter of Henry II., together with two burgesses, of the earl's gift, in Winchester. A strange entry in the great record shows us Tofig, an Englishman, obtaining possession, 'through earl William,' of half a hide in Meon, part of an estate which he himself, perhaps, had held and lost. But one of the most notable entries, in the Hampshire Domesday, relating to the earl is preserved by accident alone. The great manor of 'Ceptune,'<sup>1</sup> which had belonged to earl Godwine, is entered in 1086 as held by earl Roger (de Montgomery); and it was only the circumstance of Sunworth (in Buriton) being then claimed as part of that manor that led the jurors of the Hundred to record that 'Earl William who gave Ceptune to him did not grant him Sunworth' as well. From this we learn that earl William had held this great manor on the Sussex border, a fact on which the record is silent in its main entry on the subject. We might, perhaps, from these facts, infer that in some other cases earl William had 'given' fiefs, though Domesday may be silent on the point, in Hampshire as well as on the Welsh march. Indeed, on fo. 50, two suggestive entries speak of Englishmen (Cole and Ælfric) 'buying' and 'redeeming' land from the earl just as if he were the king himself.

Roger, earl of Hereford, his son, had brought down others with him in his fall. Among these was Ralf de Limesi, to whom his father, earl William, had granted lands on the Welsh border near his castle of Chepstow. We learn from the Gloucestershire Domesday that Ralf had obtained the estates of a great Wiltshire thegn, Alestan 'de Boscumbe'; and in Hampshire we find an allusion to this in the entry under 'Slac-ham,' fo. 39: 'Alestan tenuit in alodium de rege E. . . . Quando Radulfus de Limesi recepit erant ibi, etc.' In this instance the manor had passed to the king, clearly because he needed it for his forest; but Ralf's lands, as a rule, were granted to William de Eu. Accordingly, in the record of William's Hampshire fief, we read of his manor at Silchester: 'Alestan tenuit de rege E. in alodium' (fo. 47). Here then also Ralf de Limesi must have been the first Norman grantee, and have lost the manor afterwards, as he did, it seems, the others which he owed to earl William.

<sup>1</sup> Extending over Chalton, Clanfield, Blendworth, and Catherington.



## THE DOMESDAY SURVEY

The evidence of Domesday Book on another subject, the making of the New Forest, is of more than local interest. Important as it is for Hampshire history, it has also a direct bearing on the character of the Conqueror and of his rule. One cannot, therefore, pass it by. As far back as 1789, Gough, in his edition of *Camden's Britannia*, challenged the traditional view of the matter, based on the statements of our early chroniclers, and appealed to the evidence of Domesday.<sup>1</sup> In 1793, Warner, the historian of Hampshire, developed this argument, dealing more exhaustively than Gough with 'the incontrovertible evidence of Domesday Book on the subject,' and bringing to bear his knowledge of the district, in which he had himself been bred. Mr. Warner investigated with great care 'this questionable point of English history,' and arrived at the conclusion that 'the vulgar opinion on this subject is altogether erroneous.'<sup>2</sup> From the elaborate tables he compiled it appears that Domesday Book records 108 'places, manors, hamlets, and villages' as affected more or less, 30 of these being altogether absorbed in the Forest. In many cases, however, the woodland alone, he reminds us, was interfered with. The net results of his calculations as to the places affected is that there was a fall in assessment from 212½ hides to 72½ hides, and in annual value from £337 18s. to £133 4s. Of the thirty 'severe sufferers,' as he terms them, he writes that these localities could never have been fertile,—

the nature of the soil which covers them being by no means adapted to tillage. The oak, the beech, and other forest timber arrives at great perfection in them; but their sterile surface must always have been extremely adverse to the operation of the plough.

It should be observed that Mr. Warner's conclusion that the New Forest must always have been 'a sterile and woody district' is in absolute accordance with the verdict of geology that 'Most of the New Forest must always have been waste, only valuable as rough pasture or for hunting, and can never have been thickly populated.'<sup>3</sup> This conclusion is of great importance.

Sir Henry Ellis, though acquainted with the work of Gough and Warner, adopted virtually the old view, but held that William added 'nearly seventeen thousand acres' to 'an anterior forest.'<sup>4</sup> Sir Francis Palgrave, a generation later, completed the reaction by accepting the most extreme statements of the chroniclers, writing that 'sixty churches are cast down in the fertile townships now desolate and abandoned.'<sup>5</sup> And yet Palgrave was unrivalled in his knowledge of our national records and in the use he made of them. Before his work was published,

<sup>1</sup> Vol. I. p. 129.

<sup>2</sup> Vol. I. (part 2), p. 37-57. And see *Gentleman's Magazine* (1793), lxiii. (2), p. 743.

<sup>3</sup> See p. 39 above, and compare p. 413 below.

<sup>4</sup> *Introduction to Domesday* (1833), I. 105-110. Ellis based his calculation on the view, now abandoned, that a hide represented 120 acres. The reduction of 140 hides was one of assessment, not of area.

<sup>5</sup> *England and Normandy* (1864), IV. p. 9 (so also pp. 644-648, 680, 682).

## A HISTORY OF HAMPSHIRE

but after his death (1861), Mr. G. R. Wise produced his book on *The New Forest*,<sup>1</sup> in the third chapter of which he summed up with great ability the arguments against believing the chroniclers' stories.

But the latest and the most important verdict on this question of history is that of Professor Freeman. Accepting the statements of William of Malmesbury, Orderic, and Florence of Worcester, in conjunction with the evidence of Domesday, he spoke of 'the ruined homes and churches of Hampshire,' and of the 'devastation of a large tract of fertile country,' his view being set forth as follows :

In Hampshire, then, no doubt the most civilised and best cultivated part of the kingdom, . . . a fertile district, thirty miles in extent, was deliberately laid waste. In the days of Eadward and the kings before him it had been a flourishing land, full of the habitations of men, and thick set with churches where the worship of God was duly paid. At William's bidding men were driven from their homes ; their houses were pulled down, their churches were rooted up, and the fruitful land became a wilderness.

We read, further, that 'the guilt of the making of the New Forest' was even worse than that of the awful 'harrying of Northumberland,' that it was 'William's greatest crime,' that he was guilty of 'the desolation of Hampshire for his own wanton pleasure.'<sup>2</sup> In a postscript, however, to his second edition (1876), Mr. Freeman, after reading Mr. Wise's arguments, reluctantly admitted that there must have been 'a good deal of exaggeration' in the chroniclers' stories, though, he added, 'I must cleave to the view with which I set out' (p. 859).

This important question having thus been left unsettled, it is desirable, in the present work, to explain clearly how the matter stands. The evidence not only of geology and agriculture, but also—though Mr. Freeman denied it—of Domesday itself, is absolutely irreconcilable with the statements of the chroniclers as accepted by him in the passages quoted above. We have but to take the case of Ælfric the Englishman, whose land at Brockenhurst, in the heart of the forest, which his father and uncle had held under Edward, was not only tilled as before, but had actually doubled in value at the time of Domesday (fo. 51*b*). Ælfric, moreover, had been compensated for what loss he might have sustained elsewhere in the forest by the grant of an estate at Milford, which, though partly afforested, was as valuable as it had been under Edward (fo. 51*b*). It is impossible to accept the statement of William of Malmesbury that the Conqueror destroyed churches and emptied the villages of inhabitants 'for more than thirty miles,' or that of Orderic that he laid waste 'more than sixty parishes' in a singularly fertile district, or that of Florence that the land had been 'full of the habitations of men and thick set with churches.' The evidence of geology, cited above, is confirmed by that of agriculture ; Mr. Rose

<sup>1</sup> The preface to second edition is dated 1863.

<sup>2</sup> *History of the Norman Conquest*, IV. (1871), pp. 611–615 ; IV. (1876), pp. 608–611, 840–842. So also *William Rufus* : 'the spot where the dwellings of man and the houses of God had been swept away' (II. 316). Mr. Hunt accepts without question Professor Freeman's view in the *Dictionary of National Biography*, Vol. LXI. (1900), p. 299.



## THE DOMESDAY SURVEY

aptly quoted an Essay on Hampshire farming, in which the unproductive character of the soil in the district, as a whole, is insisted on.<sup>1</sup> The peculiar interest of this investigation is found in the light it throws on the chroniclers' authority.<sup>2</sup> The detestation, among all classes, for the forest policy of the Norman kings led these writers to make statements, on the subject of the New Forest, which deprive their testimony of all credit. From Domesday Book alone can we hope to learn the facts; and the Domesday map in this volume will enable them, for the first time, to be systematically studied.

The economic crime of laying waste a fertile and populous district must be kept distinct from the question of wrongs done to individuals. After the evidence adduced above, the alleged crime assumes comparatively small proportions; the land thrown out of cultivation by the making of the New Forest was neither so fertile nor so extensive, in all probability, as that which our economic policy has reduced to waste in Essex alone. As to the injury to individuals, it seems to have been strangely overlooked that the manors of the king himself (fos. 38*b*, 39) and of his Norman followers (fos. 50*b*, 51) appear to have borne the bulk of the loss. The English thegns of the district were, of course, affected also; but it cannot have made, to them, much practical difference whether they were despoiled for the king's forest or dispossessed in favour of some greedy Norman. Whether in or out of the Forest, few of them kept their lands. Among those classes who tilled the soil there was doubtless some enforced migration; but these, at that time, had little to lose. But contemporary hatred of the forests, and of their cruel law, gave curiously rapid rise to what was virtually a legend, although it has been eagerly accepted by some, in our own time, who were personally hostile to sport.

In dealing with the evidence that Domesday affords as to the condition of the county in 1086, we ought, in the spirit of the Survey itself, to begin with the interests of the Crown. It is, unfortunately, not possible to estimate, with any approach to accuracy, either the area in the king's lands at the time of the great Survey or the actual income he derived from it. But this much at least is certain: the area was much greater at William's death than at Edward's; and within that area the rental had, in many cases, been raised. Forfeitures in the early days of the Conquest were but one of the sources of the Crown's enlarged estate. When Stigand, the deposed primate, died a prisoner at Winchester, when earl Roger of Hereford forfeited his vast estates, when queen Eadgyth, 'the Old Lady,' passed away at Winchester, the king's demesne here and elsewhere received fresh additions. We know that in the eleventh century the Crown 'farmed out' its lands; but the system on which it did so is by no means so clear as could be wished. There are, however, in Domesday passages which seem to imply that a 'firma comi-

<sup>1</sup> *Journal of the Royal Agricultural Society*, Vol. XXII. part 2 (1861), No. 48.

<sup>2</sup> Compare my *Feudal England*, pp. 281, 290, and especially p. 454.

## A HISTORY OF HAMPSHIRE

tatus' already existed, that is to say, that the royal manors within a county, or a given district, were already farmed as a whole.<sup>1</sup> In the Hampshire survey there are several allusions to this system of 'firma.' We read of Twynham (Christchurch), as of King's Clere and Hurstbourne, 'De firma regis Edwardi fuit.' At Rockbourn (an old royal manor) the sheriff's officers claimed half a hide as belonging 'ad firmam regis,' but the tenant maintained that he held it by gift of king Edward (fo. 50); in Clere Hundred a huntsman held two hides 'de firma regis,' which king Edward had given him (fo. 50b). A very curious entry under Northam (fo. 49b) tells us that 'Ezi tenuit de rege E. et fuit de firma regis et ejus tempore fuit missa foris sed hund[red] nescitur quomodo.' This suggests a trick of the sheriff, if Ezi was the sheriff of that name. Conversely, Harold is charged (fo. 38) with taking advantage of his reign to add to the sources of his *firma* ('misit in firma sua') three manors which did not belong to it. Again, the entry, 'Hoc manerium jacet in firma regis quam habet de insula de Wit' (fo. 38b), distinctly points to the king's rights in the Isle of Wight being farmed as a whole.

The raising of the rents exacted may, in some cases, have been justified, but that it was often grossly oppressive we know on the excellent authority of the Domesday commissioners themselves. Mapledurham (fo. 38) was over-rented by about fifty per cent.; Meon, worth £60, was paying £100 and more, 'sed non potest pati' (fo. 38); on manor after manor we find its estimated annual value contrasted with the sum, largely in excess, wrung from its tenants by the king's reeves. When we turn to the Isle of Wight (fo. 52), we find the first five of his manors valued as worth £50, yet paying £77. Keen and avaricious in money matters, the Normans loved the speculation of farming the king's manors; the baron, and even the prelate, took a hand in the game. Hugh de Port himself, the greatest man in Hampshire, farmed royal manors not only there but in Rutland; William the son of Stur contrived to pay the Crown £60 for four manors in the Isle of Wight, 'although they are worth less' (fo. 52); and even the bishop of Winchester, it seems, found it worth his while to farm the borough of Colchester.<sup>2</sup>

The bishop, indeed, in Domesday, appears as exacting as the king. From Meon, worth £30, he exacted £40 a year, 'but it cannot bear it long' (fo. 40b); Fareham, worth £16, was 'farmed' for £20, 'but it cannot bear it' (fo. 40b); Exton was 'bound to render' £30, though only worth £20, 'but it cannot bear it' (fo. 41b), and so on. His Isle of Wight manor suffered like the rest. Formerly worth, in all, £16, it is returned in 1086 as worth £30, in spite of alienations amounting, it would seem, to more than £8. Yet the bishop, not content with this, exacted a rent of £40; 'sed non potest pati nec reddere' (fo. 52b). Even the churches were not spared: from those on his manor of Alresford he had wrung half as much again as they were worth, till 'they could not bear it' (fo. 40). It is in such entries as these that is revealed

<sup>1</sup> See *The Commune of London and other studies*, pp. 72-73.

<sup>2</sup> 'Walchelinus episcopus,' the burgesses complain, 'querit ab illis xl libras' (II. 107).



## THE DOMESDAY SURVEY

the dark aspect of the mighty pile that was then rising within the walls of Winchester, and by which the bishop's memory is preserved to our own time. They may also lead us to reconsider that high estimate of his character which is based on the local writer's glowing panegyric.<sup>1</sup> He, the associate of Rannulf Flambard, when the latter, 'from his lair at Winchester, laid heavy burdens on all men,'<sup>2</sup> was hardly the man we should expect to pray for death sooner than raise £200 by 'squeezing the poor or robbing churches.'<sup>3</sup> It is, however, only fair to state that there are some other cases in Hampshire where manors are entered as over-rented by Norman tenants-in-chief.

Closely connected with the question of rent is that of the coin in which the rent was paid. I have elsewhere shown<sup>4</sup> that the Domesday mention of 'alba firma' from an Isle of Wight manor (fo. 39) flatly contradicts the statement, hitherto accepted by historians, of the 'Dialogue on the Exchequer' that there is no mention of it in Domesday. The same page contains a most important entry of a manor paying £25 'ad pensum et arsuram' a year in the days of king Edward. This entry carries back the whole Exchequer system of weighing and assaying money to a time earlier than the Conquest. It is rash to define too positively Domesday phrases relating to money, for the habit of the Domesday scribes, on the one hand, of inserting or omitting qualifying words as if they were of no consequence, and, on the other, of changing their phraseology, but not their meaning, renders highly precarious all deductions from their language. We may, however, distinguish the simple payment by tale ('ad numerum'<sup>5</sup> or 'numero'<sup>6</sup>), payment in money up to weight ('ad pensum'),<sup>7</sup> and payment in assayed, or 'blanch,' money ('solidos albos,' 'de firma alba').<sup>8</sup> In some instances we find these payments contrasted. Thus Odiham (fo. 38) was valued at £50 by tale in the time of the Confessor, but £50 in weighed money in 1086; Sandford and Week, which had paid in money both weighed and assayed, paid, under the Conqueror, in money merely weighed (fo. 39b). Another Island manor paid 'libras blancas de xx<sup>ti</sup> in ora' (fo. 39b), while Holdenhurst, which is worth only £24 'ad numerum,' yet pays £25, 'de xx<sup>ti</sup> in ora' (fo. 39). The meaning of this 'twenty to the ounce' is not, I think, so clear as could be wished; but it is said to distinguish the pound of twelve ounces, with twenty pence to the ounce, from a pound of sixteen ounces, with sixteen pence in each. It seems at least doubtful whether such distinction was needed.

We may now pass from the king's lands and examine the rest of Hampshire, as to 'how it was set, and by what men,' to quote the

<sup>1</sup> *Annales Monastici* (Rolls Series), II. 39-40. I do not, however, find in Domesday any evidence for the statement that he deprived the Old Minster of land, worth £300 a year, for the benefit of himself and his successors.

<sup>2</sup> Kitchin's *Winchester*, p. 62.

<sup>3</sup> *Ibid.* p. 66; and *Annales* as above.

<sup>4</sup> *The Commune of London and other studies*, p. 66.

<sup>5</sup> fo. 44b (Bishop's Sutton).

<sup>6</sup> fo. 39 (Ringwood).

<sup>7</sup> fo. 38 (Meon).

<sup>8</sup> fo. 39b.

## A HISTORY OF HAMPSHIRE

English chronicle's description of the great Survey. And first, as did Domesday, we will take the Church.

It is to Domesday Book that we must turn for authoritative evidence of the effects of the Norman Conquest on the temporalities of the Church. In Hampshire five religious houses, in addition, of course, to the bishop, had held valuable estates under Edward the Confessor. These were the Old Minster, 'St. Peter of the bishopric' as it is styled in Domesday, and the New Minster, 'St. Peter of Winchester' (afterwards Hyde abbey), side by side within the city walls; Wherwell abbey and Romsey abbey; and St. Mary's nunnery at Winchester. In addition to these, the church of canons at Twynham (now Christchurch) possessed some lands and tithes. Glastonbury abbey held a single hide, and Milton abbey twelve acres. Three more religious houses appear among the holders of land in 1086; for the abbeys of Westminster and of Gloucester had secured a manor apiece, and that of Chertsey had obtained two. In the Isle of Wight, Wilton abbey retained a manor it had long held.

Before passing to the Norman monasteries which had, naturally, gained by the Conquest, we will glance at the losses, or alleged losses, sustained by the English houses. On the first page of the Hampshire Survey we find the king holding the great manor of Meon, from which the monks of the Old Minster had derived, in the days of Edward, sixty pounds a year. Unfortunately for them Stigand, their bishop, had held that manor 'ad opus monachorum,' not only after he became primate, but even after his deposition and to the day of his death. And then king William seized it. Far away in the fenland the monks of St. Etheldreda had no less cause to rue their connection with the great pluralist. Keeping four of their manors in his hands, he paid them, year by year, the rents; but when he died King William laid his hands upon them all.<sup>1</sup> Nor was this the only loss sustained by the Old Minster; we shall find it claiming that it was similarly defrauded of its reversionary right to the manor queen Emma had given it at Hayling. And three manors which it used to hold are found in 1086 on the fief of Ralf de Mortimer, who refused, we read, to recognise its rights (fos. 41, 46*b*, 47).<sup>2</sup> He had also added to his fief, in Berkshire, a manor which, the shire testified, had been held 'of the Old Minster of the church of Winchester' (fo. 62*b*). 'Crawecumbe' in Somerset, a ten-hide manor, which 'the church of St. Swithun of Winchester' held under the Confessor (fo. 91*b*), had passed, in 1086, to a tenant of the count of Mortain. Returning to Hampshire, we find Chilbolton, which Ordworld had held, before the Conquest, of the bishop and the Old Minster, in the hands of a Norman, Richard Sturmid (fo. 48), who doubtless claimed that Ordworld was his English 'antecessor' (fo. 74*b*). Other of its manors had been swept into the king's forest

<sup>1</sup> See *Feudal England*, p. 460.

<sup>2</sup> Mr. Edwards held that one of these had belonged to the New Minster (*Liber de Hyda*, pp. cvii.-cviii.), but the words 'æcclesia Sancti Petri de episcopatu' are decisive.



## THE DOMESDAY SURVEY

(fo. 51). Nor was it any compensation to the Minster that the king gave lands to the bishop personally at Brownwich and, perhaps, at Meon (fo. 40b).

Historians, both general and local, are agreed that the most sensational incident of the Conquest, so far as the church was concerned, in Hampshire, was the death of the abbot of the New Minster, with twelve of his monks, on the field of Hastings, and the consequent forfeiture by his house of a large proportion of its lands. 'With their coats of mail,' Mr. Freeman writes, 'over their monastic garb, they took their place in the ranks, and fought and died . . . the aged Ælfwig, with his monk's cowl beneath his helmet . . . died by his royal nephew, leaving an inheritance of sorrow to the house over which he ruled.'<sup>1</sup> For the abbot and his monks 'were among the first to be recognised by the monastic garb beneath their harness,' and 'we know that their presence in the fight was not forgotten by the Conqueror,' who is said to have 'punished the crime of the abbot by the confiscation of a barony, and the crime of the twelve monks by the confiscation of an equal number of manors.'<sup>2</sup> The whole story figures prominently in dean Kitchin's 'Winchester' (1890), where we read that, on the battlefield, the Conqueror 'replied grimly, "The abbot is worth a barony, and each monk a manor," and made his words good by depriving the minster of full twenty thousand acres of land' (pp. 49-52). The tale was also duly accepted by the editors of the new *Monasticon* (II. 437), and by Mr. Edwards in his monograph on the abbey.<sup>3</sup>

But is the story true? The *Monasticon* printed it 'from an old manuscript in the Cottonian Library,' a curiously vague reference; and the 'grim pleasantry'—which, by the way, it does not, as alleged by the above writers, place in William's mouth—savours of a later age, when a 'barony' had lost its meaning. Moreover, the abbot is represented as bringing 'duodecim monachos et viginti milites pro servitio.' Now these knights, overlooked by Mr. Freeman in his narrative, bring doubt upon the whole story; for, unfortunately, twenty knights was the 'servitium' due from the abbey in later days.<sup>4</sup> It is desirable, therefore, to inquire what evidence, if any, there is of this vast forfeiture.

We turn, as Mr. Freeman would have bidden us, to Domesday as the test by which we must assay all stories of the kind, and in Domesday we find no trace of this alleged confiscation. There is another source, however, of information, and on it the *Monasticon* editors and Mr. Edwards seem to have relied. Thomas Rudborne, a monk of St. Swithin's, wrote about the middle of the fifteenth century, and although he ignores altogether the Hastings exploit and its punishment, he does give us a long list of manors which were taken from the abbey and bestowed by William on his knights. But immediately before it he

<sup>1</sup> *History of the Norman Conquest* (2nd Ed.), III. 428, 475, 500, 509, 744.

<sup>2</sup> *Ibid.* (1st Ed.), Vol. IV. p. 58.

<sup>3</sup> *Liber de Hyda* (Rolls Series), pp. xxxvii.-xxxix.

<sup>4</sup> *Feudal England*, p. 278; and *Red Book of the Exchequer*, p. 207.

## A HISTORY OF HAMPSHIRE

gives the names of manors taken from the Old Minster, and immediately after it he writes that the Conqueror behaved in like manner to the other monasteries and the rest of the nobles in England. He thus implies that the New Minster was in no way exceptionally treated.

Rudborne's list is sufficiently important for its gist to be given in a note,<sup>1</sup> but although its statements have been gravely accepted, they are obviously, in places, absurd. 'Hugo Portuensis comes,' for instance, is a blunder for Hugh de Port; and, so far from giving Bedhampton to the Minster under Edward the Confessor, it was he who was given the manor under William the Conqueror. Again, Hugh's 'dapifer,' Robert, could not have given Chaddleworth—not Fiddlesworth<sup>2</sup>—under the Confessor, for he only obtained it from Ode of Winchester in the days of king William. Nor did the latter take it from the Minster, which is entered as holding it in Domesday (fo. 59*b*). Yet Mr. Edwards, in his *Liber de Hyda* (pp. xxxviii.—xxxix., cxiii., 346), accepted the whole story.<sup>3</sup> As a matter of fact the New Minster added to its possessions, under William, not only the above Chaddleworth (Berks), but the extensive and valuable manor of Puddletrenthide (Dorset), the gift, apparently, of Roger Arundel (fo. 77*b*).

I am of opinion that Rudborne had before him original documents of value; but it is doubtful whether he could read them, and certain that he could not understand them. Collation with Domesday shows that the 3 $\frac{3}{8}$  hides of demesne, appurtenant to the Minster's great manor of Mitcheldever, which had passed to Hugh de Port, were at Swarraton. This we learn from Rudborne's list, so that here, and in a few other cases, his information supplements Domesday. But when we come to analyze his list, we find that it consists of two classes. On the one hand are the

<sup>1</sup> 'Ab ecclesia Wyntoniensi abstulit tria maneria, viz., Estmeone, Westmeone, et Weregraves. Et a novo Monasterio Wyntonix, quod nunc Hyda dicitur, vi abstulit et militibus suis dedit ista maneria, viz., Aburthoun cum 4 $\frac{1}{2}$  hydis, Popham cum 2 $\frac{1}{2}$  hydis, Cranburn cum 8 $\frac{1}{2}$  hydis, Draytonam juxta Nywetone cum 4 hydis, Swarewetone cum 3 $\frac{3}{8}$  hydis, et Weststrattonam cum 5 hydis . . . Lygeput cum 2 hydis, Bekendenere cum 10 hydis . . . Andevere cum 5 hydis et Wherewellam cum 30 hydis . . . Satewelle cum 10 hydis . . . Lammere cum 3 hydis . . . and in insula Etha, Meton cum 2 hydis, Badingborm cum 4 hydis, Velokedone cum 3 hydis, Estede cum 1 hyda; et in insula de Porteseye, Frederington cum 4 hydis, Suthingewerthe cum 2 hydis, et apud Berntone juxta Wherewellam 1 hydam et apud Wrefordi 1 hydam et pratum quod jacet juxta Kyngesmylle, quod dicitur Mune . . . Drayton juxta Byketone cum 5 hydis . . . Opwarneford cum 8 hydis. Hugo Portuensis comes dedit . . . Bedhamtone cum 10 hydis . . . permissione et licentia Sancti Regis Edwardi Londonix quod manerium Willelmus Conquæstor pro voluntate sua abstulit et militibus suis tradidit. Robertus dapifer Hugonis de Portu dedit . . . Fideleswerthe cum decem hydis et sex . . . permissione et licentia Sancti Edwardi Regis sed Willelmus Conquæstor illud ab ipso monasterio rapuit injuste et militibus suis tradidit. Consimili modo se habuit Willelmus tyrannus aliis Monasteriis et cæteris nobilibus Angliæ (*Anglia Sacra*, I. 248–9).

<sup>2</sup> This is Mr. Edwards' version of 'Fideleswerthe.'

<sup>3</sup> See also the new *Monasticon*, II. 428. Oddly enough neither Rudborne nor any of these modern writers mentions the Minster's real loss of the manor of Treyford in West Sussex, which it claimed in 1086 as having been wrongfully seized by earl Roger de Montgomery (fo. 23). The claim, as in other cases, was that the English tenant had only held a life interest in the manor, which ought to have reverted to the Minster.



## THE DOMESDAY SURVEY

manors, such as Wherwell and Andover, which the Minster had not held under Edward, and of which, therefore, William cannot possibly have deprived it. On the other, are those which Domesday enters as held of it by Norman tenants. Of these last we can identify eight at least in Domesday as held by Hugh de Port. It is singular that although, in his *Liber de Hyda*, Mr. Edwards has given a complete translation of all the Domesday entries relating to the abbey's manors,<sup>1</sup> the real explanation of the story did not suggest itself to him. For the manors held by Hugh from the abbey he owed it, as we learn from the return of 1212, the service of six knights.<sup>2</sup> The case, therefore, was exactly parallel to that of any other abbey which enfeoffed military tenants to discharge its knight-service.<sup>3</sup> I have elsewhere shown that this compulsory enfeoffment, by the religious houses, of military tenants, was one of the distasteful results of the Conquest,<sup>4</sup> entailing, as it did, a loss of revenue. But if the New Minster was called on to provide twenty knights, the bishop, with his Old Minster, had to provide sixty;<sup>5</sup> and two of these were similarly due from manors held by Hugh de Port and by his son and grandson after him.

Domesday, 'that great record from which there is no appeal,'<sup>6</sup> shows us, indeed, the New Minster as enjoying William's favour rather than as visited by his wrath. From him it obtained Laverstoke 'for his soul and the soul of his wife,' while the lands in Kingsclere and in Aulton represented the compensation he assigned it for the site, in Winchester, of his palace, a compensation which the jurors of the shire seem to have thought too liberal (fo. 43). The alleged confiscation of its manors, on a colossal scale, at his hands must now be relegated to the realms of fiction; but the prominence hitherto assigned it in the history of the county at the time has made its elaborate disproof a matter of absolute necessity.

Except for the loss by the nuns of Winchester of their manor at Itchen, which Hugh Fitz Baldric held in 1086, the religious houses appear to have suffered no other appreciable loss; and this last aggression was righted at William's hands (fo. 48).

Of the Norman houses, the abbey of Jumièges had obtained a manor, from the Conqueror, at Hayling, and Mont St. Michel had secured the rich living of Basingstoke, which had been held by Walter, bishop of Hereford, a Lotharingian favourite of Edward. The endowments bestowed, in Hampshire, on the abbeys of Corneilles and of Lyre

<sup>1</sup> *Liber de Hyda* (Rolls Series), pp. xcix.-cxiv.

<sup>2</sup> *Testa de Nevill*, p. 239; and compare p. 232.

<sup>3</sup> This is particularly well seen in the entry of a Berkshire manor of the Minster: 'Ipsa abbatia tenuit Sotwelle in dominio de victu monachorum T.R.E. Modo tenet Hugo de Port de abbate in feudo' (fo. 60).

<sup>4</sup> See *Feudal England*, pp. 298-303.

<sup>5</sup> *Ibid.* p. 278. Thus it was, for instance, that Freefolk and Polhampton (fos. 41, 41b), of which the rents (£32) went to 'the support of the monks' of the Old Minster T.R.E., were held in 1086 by an enfeoffed tenant, Ralf.

<sup>6</sup> The phrase is Mr. Freeman's own.

## A HISTORY OF HAMPSHIRE

are, as elsewhere, traces of the power of their founder, William Fitz Osbern. But the former house had also obtained a church, with glebe, at Anne, by the gift of Gozelin de Cormeilles, doubtless a follower of William. The manor of Penton (Grafton), which had been held by queen Edith, fell to the share of the abbey of Grestain. That mighty earl, Roger de Montgomery, had bestowed on his abbey of Troarn a manor in Hayling Island. Nor did Ralf de Mortimer forget the abbey he had founded, for monks from St. Ouen, beneath his castle walls, at St. Victor-en-Caux. These benefactions were supplemented by others, such as those to Cerisy and to Rouen, in the later days of the Norman period. One should, perhaps, mention here the 'clerks,' whose identity is not revealed, but who held Preston Candover of earl Roger.

It is always rash to argue from the evidence of Domesday in the matter of parish churches. But so long as we restrict ourselves to statements of fact, we remain on safe ground. The holding of Thomas archbishop of York (fo. 42) presents features of special interest. It consisted of the parish church of Mottisfont with six dependent chapels, 'with all dues from the living and the dead.' As these 'chapels' were at Broughton, Pittleworth, East Tytherley, West Tytherley, (East and West) Dean, and Lockerley, it is evident that Mottisfont was the mother church of the whole district to its north-east, fully four miles square, now lying between the lines of railroad to Andover and to Salisbury. A valuable estate, assessed at nearly five hides, belonged to the church of Mottisfont; and this had made it a coveted prize. Domesday tells us that the 'antecessor' of archbishop Thomas had held it under Edward the Confessor; but it gives us no light as to who that predecessor was. Possibly it was Ealdred, his predecessor in the see of York, to whom and to his fellow-pluralist, Stigand, he had succeeded territorially in Gloucestershire.

Many churches are entered in the Hampshire Survey, with an occasional 'æcclesiola.' Odiham is credited with four churches, worth with their glebes nearly £9. But this was one of those royal 'manors' which must have covered a wide district. The same explanation applies, probably, to the great episcopal 'manor' of Alresford, with its three churches worth £4. From the church on his Meon manor the bishop, it would seem, drew fifty shillings a year. Richer, the clerk, who appears to have been of an acquisitive disposition, held of the bishop Stoneham church, 'with two others near Southampton, of which it is the mother church.' In the Isle of Wight the six churches given to the abbey of Lyre held between them a substantial estate (fo. 52*b*). An interesting and difficult entry on fo. 38*b* describes a division of the tithes, on the royal manor of Wallop, between the church and an 'æcclesiola.' To the former it assigns also the whole 'cirset,' a due which occurs on the opposite page, under Hurstbourne, as 'circisset,' and which has been defined by Dr. Stubbs as 'cyrice-sceat or church-scot, a sort of commutation for firstfruits paid by every householder.' Further allusions to tithes are found on fo. 39*b* (where 'all the tithe of the manor' was held by



## THE DOMESDAY SURVEY

Lyre abbey), fo. 41*b* (where Richer, apparently, holds tithes 'of the king' and 'of the bishop'), fo. 43 (Basingstoke), fo. 44 (tithes belonging to Twynham), and fo. 52 (Bowcombe). There are also many entries of what we may term glebe, that is, land appurtenant to a church. 'Half a hide' is a typical amount. It is clear, however, that the endowment of the parishes varied a good deal.

To understand aright the Norman settlement of England, it is necessary to study systematically the tenants named in Domesday Book. They present a field for research that has been insufficiently worked. In Hampshire, as in other counties, we have first the lands of the king, then those of the church, and lastly those of the lay tenants. The two points to which we may profitably direct our attention are the mode of formation of the Domesday fiefs, and the names of the Domesday tenants specially connected with Hampshire.

It is probable that William dealt with the lands forfeited by Englishmen much as his sons dealt with those which were forfeited by their Norman holders. That is to say, he gave his followers, either the whole estate of some individual Englishman, or certain manors which he mentioned by name. Much might depend, for the Norman grantee, on which of these two courses the king adopted. For if he was merely placed in the shoes of a given Englishman, it was for him to prove that the land he claimed had been held by his 'antecessor.'<sup>1</sup> We have a good example of such a grant in the fief of Bernard Pancevolt, consisting of five Hampshire manors and one in Wilts, the whole of which had been held, before the Conquest, by a Godwine. So also of the manors, sixteen in number, held in Hants by Ralf de Mortimer, thirteen had belonged to an English thegn, Cheping, who, as I shall show, was his 'antecessor' at Southampton and Winchester as well. Again, the name of the 'antecessor' may sometimes take us far afield. It is, for instance, often urged that William deliberately scattered a fief over several counties in order to weaken its holder's power. But this scattering might be only the result of granting the estate of a given thegn. Thus, in Hampshire, Alvred of Marlborough had, in both his manors, succeeded a certain Carle, who was also his 'antecessor' in Surrey and Somerset, and in the bulk of his Wiltshire lands. Arnulf de Hesdin had for his predecessor, in his two Hampshire manors (43, 46*b*), an Edric, who was clearly also his predecessor in the three he held in Somerset, and in some of his lands in Gloucestershire, Wilts, and Dorset. In like manner Nigel the physician held lands in Wiltshire, Herefordshire, and Shropshire, as well as in Hampshire, because in all four counties he had succeeded Spirtes, a rich and favoured English priest.

On the other hand, a Domesday tenant-in-chief may have received a *congeries* of manors lying in a single shire. Of this there is a very striking instance in the fief of Hugh de Port. Except for two manors

<sup>1</sup> Thus, for instance, Henry I. gave Walter de Gloucester 'totam terram et teneuram que fuit Edrici filii Chetelli.' See my *Ancient Charters*, p. 34.

## A HISTORY OF HAMPSHIRE

in Cambridgeshire, and one apiece in Berks and Dorset, the whole fief lay in Hampshire, where it was by far the greatest holding of any lay tenant. To the fifty-six manors, or thereabouts, which he held direct, in Hampshire, from the Crown, must be added thirteen others, which Domesday enters him as holding 'from the bishop of Bayeux' (fo. 46). And here one may observe that his fief illustrates the uncertain manner in which Domesday treats the bishop's lands. Of Hugh's two Cambridgeshire manors, one was held, it tells us, 'of the fee of the bishop of Bayeux': yet it groups the two together as held in chief of the Crown. In Hampshire it splits its fief in two, and heads separately that portion which he held 'from the bishop of Bayeux.' This is a kind of middle course; for in Kent it treats him only as an under-tenant of the bishop.

The exceptional proportions of Hugh's fief, as entered in the Hampshire Domesday, together with its prolonged existence, intact, in the hands of his heirs, combine to invest it with a dominant, indeed a unique position in the feudal history of the county. It is, therefore, deserving of special attention as illustrating the territorial position of a great Norman tenant-in-chief. It is desirable, in the first place, to lay stress on a point that is, perhaps, imperfectly grasped. Even as William was a king in England, but in France only a feudatory duke, we find among his followers men holding, at one and the same time, the position of a baron, or tenant-in-chief, and that of a 'man,' or under-tenant. A careful study of the individuals named in Domesday Book will suggest that this duplication of status was very widely spread and must often have given rise to relations of great complexity. Nor could it be better illustrated than in the case of Hugh de Port. Apart from the manors he held in chief and those he held practically in chief, though nominally, as we have seen, 'from the bishop of Bayeux,' he held, in Hampshire, as an under-tenant, estates from no fewer than five tenants-in-chief. These, to take them in their Domesday order, were: the bishop of Winchester (Abbotstone), the Old Minster (Binsted), the New Minster (Brown Candover, manors in Mitcheldever, Bedhampton, Warnford, Lichfield), Chertsey Abbey (Elvetham), and Walter Fitz Roger (Barton). In addition to these holdings, which are certain, he may possibly be identical in some cases with one of the under-tenants entered simply as 'Hugh.' On his own fief, it must be remembered, he had at least two under-tenants, Hugh de St. Quintin and Herbert the Chamberlain, who occur elsewhere as tenants-in-chief. It was not only a complexity of relation, foreign in spirit to the feudal system, that arose from this duplex status: we have also to appreciate its important bearing on the total number of the Norman settlers and on the actual value of their estates.

When Ellis, in his *Introduction to Domesday*, II. 449, reckons that there were in Hampshire 128 tenants-in-chief and 174 under-tenants, it must be remembered that many names would appear in both lists, and that the total number must be reduced accordingly.<sup>1</sup> Again, as to the

<sup>1</sup> See also my *Commune of London and other studies*, p. 38. In Hampshire, moreover, Ellis



## THE DOMESDAY SURVEY

income from a fief, it would be most misleading merely to add the recorded values of the manors composing it together. On Hugh de Port's double fief, held of the king and of bishop Odo, he held some of the manors 'in demesne'—kept them, that is, in his own hands—while on others he enfeoffed tenants. It was only from the former class that he received the rents himself; from the others he would have nothing but 'the feudal incidents' due from their knightly tenants who kept their profits for themselves. On the other hand Hugh, in like fashion, received the profits from those manors which he held as an under-tenant himself and not as a portion of his fief. It would, therefore, be very rash to attempt a valuation of his revenue, the more so as he probably increased it, like other Norman magnates, by 'farming,' as we know he did, certain of the king's manors.

If we look down the first column of Hugh's Hampshire fief, we find on every manor a fresh name as that of his English predecessor. In striking contrast with this is the fief of Bernard Pancevolt, which had all belonged, as observed above, to one English predecessor. Bernard, however, resembled Hugh in being an under-tenant as well as a tenant-in-chief. As Mr. Eyton and Mr. Ellis have shown, he held manors under Turstin Fitz Rou in Gloucestershire, Somerset, and Dorset. His name, doubtless, was one of those strangely grotesque nicknames which the Normans loved to bestow; for the words 'panse volt' in old French would represent 'paunch face.' It was preserved in Hampshire by Pauncefooteshill, a manor in Romsey.<sup>1</sup>

Turning now to the personal history of the leading Hampshire tenants, Hugh de Port again must occupy the foremost place. Deriving his name from Port-en-Bessin, a fishing village five miles from Bayeux, Hugh was clearly a vassal of bishop Odo of Bayeux, from whom he held so largely in Hampshire and in Kent, and from whose successor his son Henry still held, in Normandy, three knight's fees in 1133. It was, perhaps, due to the fact that the abbey of Cerisy (in the forest of that name) was only some twelve miles, as the crow flies, from Port-en-Bessin, that when Hugh founded a priory on his English fief, at Sherborne, he bestowed it upon that abbey. The one difficult point to decide, in dealing with Hugh, is that of the official position held by him in Hampshire. That he was a 'farmer' of royal manors is certain. Under Eling and Holdenhurst, for instance, we read (fos. 38*b*, 39): 'Quando Hugo de Port recepit,' that is, when he received them 'to farm.' But did he 'farm' them as sheriff? The above *formulae* seem to be equated by the 'quando vicecomes recepit' on the next manor (fo. 39), and on fo. 47 we even find the phrase, 'per Hugonem vicecomitem.' That this was Hugh de Port is strongly suggested by the statement that a king's reeve had acted wrongfully 'nesciente Hugone de Port' (fo. 42). This would almost amount to proof, were it not for the

reckons the tenants-in-chief and under-tenants of the New Forest district, as well as those of the Isle of Wight, separately, which still further exaggerates the number.

<sup>1</sup> *Calendar of Inquisitions: Henry VII.*, I. 259, 987, 989.

## A HISTORY OF HAMPSHIRE

list of benefactors in the Register of Hyde abbey.<sup>1</sup> We have there, indeed, a charter of its abbot, shortly before Domesday, which ‘Hugo vicecomes’ attests immediately after the bishop (p. 164); but while ‘Hugo de Port, Orence conjux ejus’ are entered in the Register (p. 73)—an entry which gives us his wife’s name,—we also find (p. 51): ‘Hugo vicecomes et ejus conjux Hadewisa et Simon alii filii et filie.’ As this suggests that ‘Hugh the sheriff’ was some other man, we must hesitate to assert that Hugh de Port held that office. It was, however, certainly held by his son and successor, Henry, in the early years of Henry I.<sup>2</sup>

In addition to ‘farming’ royal manors in his own county of Hampshire, Hugh de Port acted for the Crown in another part of England. On the first page of the Northamptonshire Survey (fo. 219) we find him farming a block of manors in Rutland, on the Northamptonshire border, which had fallen into William’s hands on the death of queen Edith. His mention in that district confirms the Westminster charters in which he is addressed by the king,<sup>3</sup> and personally bidden to give seisin of certain churches in Rutland which had belonged to Albert of Lotharingia<sup>4</sup>; to ‘St. Peter of Westminster’ himself.<sup>5</sup> This transaction must be dated between 1087 and 1092. Oddly enough we learn from a chance mention in Domesday that Hubert de Port of Mapledurwell had a similar position in Suffolk, where he had given seisin, not to a Saint, but to a bishop who was much the reverse.<sup>6</sup>

Among other tenants-in-chief connected specially with Hampshire we may note William ‘Malduith’ who held some nine manors, and whose name is preserved in Hartley Mauditt. Of him something must be said under tenants by serjeanty. Waleran the huntsman held in Wiltshire fifteen manors in addition to his nine in Hampshire, and he was also the ‘Walerannus’ who held in Dorset nine manors, one of which, Sutton Walrond, still preserves his name. These estates became a great barony, of which the *caput* was in Wiltshire; but as the forestership of the New Forest was vested in his heirs,<sup>7</sup> and probably in himself, he deserves mention under Hampshire. It may be added that, as an under-tenant, he held from the bishop of Winchester in Wiltshire, as from the bishop of Salisbury and the abbot of Glastonbury in Dorset, all these holdings passing, as knight’s fees, to his heirs.

Most of the remaining lay tenants must be dealt with under other counties. But Robert Fitz Gerold should perhaps be mentioned, as the

<sup>1</sup> Published by the Hampshire Record Society.

<sup>2</sup> See my *Calendar of Documents Preserved in France*, No. 154.

<sup>3</sup> *Monasticon Anglicanum*, I. 301–2.

<sup>4</sup> See the *Commune of London and other studies*, pp. 36–38.

<sup>5</sup> ‘Et tu Hugo de Portu inde eum saisias.’

<sup>6</sup> ‘Hubertus de Portu saisierat episcopum [Baiocensem] . . . sed tamen nescit si Ubertus (*sic*) prius saisierat episcopum,’ etc. (II. 377). For Hubert de Port and Mapledurwell see my article on ‘the Families of St. John and of Port’ in *Genealogist*, July 1899, pp. 1 et seq.

<sup>7</sup> Pipe Roll of 1130 (p. 17) and succeeding ones.



## THE DOMESDAY SURVEY

bulk of his fief lay in the district. With ten estates in Hampshire and nine in Wiltshire, he held also three in Dorset, two in Berks, and one in Somerset. He was the son of Gerold de Roumare who held land at Roumare (which gave name to a forest on the Seine) and Barentin, in the Roumois, and estates also in the Dieppe district. Robert's brother Roger was father of William de Roumare, who became heir to his uncle Robert and eventually earl of Lincoln. Durand 'de Glowecestre' and Walter son of Roger 'de Pistes' were closely related. 'Milo the Constable,' their representative, held a fee of the bishop of Winchester in 1135. Although, in Hampshire, their interest was small, in Gloucestershire they were of some consequence; Durand was its sheriff at the time of Domesday, an office in which he had been preceded by his brother Roger, and was succeeded by his nephew Walter, son of Roger, father of Miles 'de Gloucester' (the Constable), first earl of Hereford. Durand and Roger 'de Pistes,' as Mr. Ellis observes, 'must have come from that now rural village of Pîtres, which nestles amid the trees, on the banks of the Seine, some miles above Rouen, at the foot of the Côté des deux Amants, so well known, even in those days, for its romantic legend.' As Roger had received the manor of Cerney from earl William Fitz Osbern, it is possible that the Hampshire lands also were obtained through his powerful patronage.

Walter Fitz Other was the ancestor of the family of Windsor in England and of all the Fitz Gerald's in Ireland. William Fitz Baderon was lord of Monmouth, from which place his descendants took their name. Of chamberlains, in Hampshire, there were many. Among them were two brothers, Humfrey and 'Aiulf,' who held houses in Southampton. The former was a holder of land in Hampshire and in six other counties; the latter had a large fief in Dorset, of which he became sheriff. In addition to Turstin and Bernard, both chamberlains, we have Aubrey, who was probably the 'queen's chamberlain' of that name in Berkshire, and Geoffrey, who was chamberlain to the king's daughter. But more notable than all these, though he only held two manors (fo. 48b), was that Herbert the Chamberlain, whose personal history with that of his immediate descendants has been worked out by Mr. Eyton, and whose house long flourished in the county.<sup>1</sup> The Pipe Roll of 1130 proves that his son and daughter intermarried with the Hampshire families of Croc and Venoix, while a son and grandson of his own name were 'knights' of the bishop of Winchester.

Of the huntsmen, numerous as we might expect, most were English, for Edward, his biographer tells us, had spent much of his time '*circa saltus et silvas in venationum jocunditate*.'<sup>2</sup> Edwin the huntsman still held the land given him by the saintly king; and so did Wulfgeat on the mainland, though he lost the two manors he had held in the Isle of Wight. His son Cola, a huntsman like his father, had two manors of

<sup>1</sup> *History of Shropshire*, VII. 146-157.

<sup>2</sup> See also notes to the huntsmen's names in text (fo. 50b).

## A HISTORY OF HAMPSHIRE

his own. Of two other of these officers of the chase, Wulfric had succeeded to his father's manor, but Turbert's land was taken into the king's forest. Seward the huntsman was still, as he had been under Edward, a tenant of the New Minster. Of Norman huntsmen, Waleran has been dealt with, as a baron, above, and Croc who, as well as his son Rainald, shared in the spoils of Hampshire, gave name to 'Crux' Easton, which he held, as 'Estune,' in Domesday.

It is only from the Winton Survey that we learn the interesting fact that Henry the Treasurer (fo. 49) was settled in Hampshire even before the Conquest. His three manors, however, were acquired after the coming of William. The one remaining tenant-in-chief of interest on the mainland is 'Rannulf Flamme,' in whom we may detect the famous Rannulf 'Flambard.' He is found again, in the section devoted to the New Forest, as Rannulf 'Flammard' or 'Flanbart' (fo. 5). In one of the three entries there we read 'Rannulfus tenuit,' etc., a formula which has, not unnaturally, led to the supposition that he held the land under Edward the Confessor.<sup>1</sup> But the formulas used in this section are quite abnormal in character, and the past tense implies only that he had held the land till it was taken into the king's forest. Rannulf, who was perhaps already connected with the central administration at Winchester, is traditionally associated with the house of canons at Twynham (now Christchurch). Although, by 1086, he had secured the wealthy living of Godalming and a small estate in Oxfordshire, it is in Hampshire that this remarkable man most frequently occurs in Domesday.

Let us now pass to the Isle of Wight. There are, among its lay holders of land, but three tenants-in-chief, namely, William the son of Stur, and William and Gozelin sons of Azor.<sup>2</sup> I have been fortunate enough to discover a charter containing some information about the first of the three. Hugh 'of the Isle,' son of William son of Stur 'of the Isle of Wight,' gave to the abbey of Marmoutier the tithe from his mill at Turlaville, on his Norman fief, with the consent of his brothers Roger and Gervase.<sup>3</sup> Turlaville lay some two miles to the east of Cherbourg, and this identification is confirmed by the fact that William, the son of Estur, a namesake of the Domesday tenant, held by knight service, in the bailiwick of Cherbourg, in 1172.<sup>4</sup> The long continuance in the Isle of the name 'Estur'<sup>5</sup> renders the above discovery peculiarly welcome.

Great as is the interest of identifying the followers of the Norman invader, the history of the men whom, under him, they displaced as lords of the soil is one of which the deep obscurity does but enhance the pathos. I am not speaking of the house of Godwine, of which, in Hampshire, as in other counties, the 'enormous wealth,' as Mr. Mait-

<sup>1</sup> Dr. Stubbs wrote that 'he had held, in the days of Edward the Confessor, a small estate in Hampshire,' but Mr. Freeman eventually abandoned this belief.

<sup>2</sup> See p. 408 above.

<sup>3</sup> See my *Calendar of Documents preserved in France*, No. 1178.

<sup>4</sup> *Red Book of the Exchequer*, p. 634.

<sup>5</sup> See *Testa de Nevill*, p. 240.



## THE DOMESDAY SURVEY

land has observed, 'is one of the best marked features of Domesday Book.'<sup>1</sup> In Hampshire, too, we find that, as he says, 'a great deal of simple rapacity is laid to the charge of Harold by jurors whose testimony is not to be lightly rejected.' And we find, I may add, his brother Tostig entered as having held in the Isle of Wight and the New Forest district a far more valuable estate than we should have been led to expect from the distant sphere of his power, and one which may have prompted his descent upon the Isle in 1066.<sup>2</sup> But when from English earls and abbots we pass to the rural thegns, the names of even the greatest among them are but as shadows in the land. A few types, however, may be given of the fate of those who had held land, under Edward the Confessor, in Hampshire. And we will first take one of those rare cases in which an Englishman was fortunate enough to weather the storm. In the three neighbouring counties of Hampshire, Berkshire, and Wilts we find the list of 'king's thegns' headed by a certain Odo, Ode, or Oda, styled 'de Winestre.' The fact that he had held land under William's predecessor would not of itself imply his English birth, but when we find that his brother bore the name of 'Eldred,' we may safely, in spite of his own name,<sup>3</sup> assume the fact. And this brother helps us further; for when we find a separate entry at the end of the Sussex Survey: 'Terra Odonis et Eldred' (fo. 29*b*), the former being styled, in the heading to that Survey, 'Odo de Winestre,'<sup>4</sup> we cannot doubt that here again Eldred is the brother of Ode. Lastly, if the former was, as I suspect, the 'Ode' who had held land in Wimborne before it passed to queen Matilda (fo. 75*b*), we meet with this Hampshire thegn in four of the counties bordering on his own. In addition to the four Berkshire manors he held in 1086, he seems to have received from William a fifth, of which Domesday records that 'Hoc manerium dedit Oda de Winestre Roberto dapifero Hugonis de Port' (fo. 59*b*). But a manor he had held under Edward was given to the bishop of Coutances (fo. 58*b*). 'Odo de Winestre' had obtained from Edward freedom from dues on his land at Southampton (fo. 52); he had also lands in the Isle of Wight, on which king William seized (fo. 39*b*), while his manor of Chawton passed to Hugh de Port, and other lands to William son of Stur (fo. 48*b*). Yet we find him holding, at the date of the Survey, five other manors (fos. 49*b*, 51*b*), all of which, before the Conquest, had belonged to other Englishmen. He also claimed a hide in Boarhunt, as against earl Roger (fo. 44*b*), and another held by Geoffrey the chamberlain (fo. 49), of which he said that 'Alsi,' who had held it under the Confessor, had (mort)gaged it to him for £10 'by permission of king William.' From this it would seem that Ode was a man with money at his disposal.

Ode's brother Eldred is found as a 'king's thegn,' holding in 1086 half a hide which he had similarly held under Edward the Confessor

<sup>1</sup> *Domesday Book and Beyond*, p. 168.

<sup>2</sup> See, for instance, fos. 39, 39*b*, 48, 52, 53*b*.

<sup>3</sup> Oda, probably, was its true form.

<sup>4</sup> They held the two adjoining manors of Iping and Woolbeeding in north-west Sussex, a few miles over the Hampshire border.

## A HISTORY OF HAMPSHIRE

(fo. 50*b*). In the same Hundred he had held at Compton, as he proved before the queen herself, a virgate of land of which he was disseised 'after king William crossed the sea' (fo. 48*b*). He had married a widow who held in dower, T.R.E., a hide and a half in Mitcheldever, under the New Minster (fo. 42*b*), and a manor of five hides under the bishop of Winchester (fo. 40), both which estates he is entered as holding in 1086. The Winton Survey shows us the 'Domus Aldrecti fratris Odonis' as held by him quit of dues under Edward the Confessor.<sup>1</sup>

The case of these two brothers may serve to illustrate the wealth of information that Domesday can, at times, be made to yield. And that of Ode has a special value as a type of William's practice in depriving even the men who had gained favour in his eyes of the lands they had held under Edward, and granting them, instead, forfeited estates. In this, it may be, there was deep policy; for they would henceforth hold by his own grant alone, and would be led, moreover, to support his rule against the English holders they had dispossessed.

Less fortunate than Ode and Eldred was a Hampshire thegn of wider estates, Cheping by name. The bulk of his lands, which under the Confessor were valued at £99 10*s*. a year, were bestowed on Ralf de Mortimer,<sup>2</sup> who received with them three houses, quit of dues, in Southampton (fo. 52) and five in Winchester. The latter are entered in the Winton Survey, from which we learn that Cheping was styled 'de Ordia.' From this we may infer his residence at (Headbourn) Worthy, by far his most valuable manor, but one which had only been leased for lives. It is probable that he was identical with the Cheping, four of whose manors (worth £25) had passed to the king (fos. 38*b*, 39*b*, 52), but who still held of the bishop a ploughland in Chilcombe as he had done under the Confessor (fo. 41). If he was also identical with Cheping the king's thegn, who had received in Candover lands worth £2 10*s*. a year in 1086 (fo. 49*b*), we have here one of those cases in which the dispossessed Englishman was assigned by William a small estate sufficient to keep him alive.

The case of Agemund is of another type. Chineham, which, under the Confessor, he had held direct of the Crown, he was forced to hold, in William's days, as the under-tenant of Hugh de Port (fo. 45). It may have been the same Agemund whose manor of East Wellow had suffered a double loss; the king's forest absorbed a portion, while a quarter of it was grabbed by Waleran the huntsman, and boldly placed in Wiltshire (fos. 48, 50).<sup>3</sup> But he held the rest as a king's thegn in 1086. Three other Hampshire manors were still held at the time of the Survey, as under the Confessor, by an Agemund; but there was another thegn of the name besides the one who held Wellow (fos. 50, 50*b*). If Englishmen, however, were often forced to hold their manors of a Norman lord, we have, in Hampshire, interesting cases in which

<sup>1</sup> See further the note to Eldred's holding in the text (fo. 50*b*).

<sup>2</sup> See above, p. 421.

<sup>3</sup> It was probably the same Agemund as this whose manor of East Grinstead, Wilts, six or seven miles away, was given to Waleran.



## THE DOMESDAY SURVEY

English thegns, Eadwine and Eadmund, had Normans, Richard and Hugh by name, for their tenants (fos. 49*b*, 50*b*).

As much land was held, before the Conquest, by women, we may glance at one who had wide estates in Hampshire and the neighbouring district. This was Wulfgifu ('Ulveva') surnamed 'Beteslau,' whose houses at Winchester are entered in the local Survey. Domesday records that she held Laverstoke of the New Minster till her death (fo. 43), and it was she probably whose great manor of Maple Derham was bestowed upon the queen (fo. 38), while the king retained another (fo. 39). Hugh de Port had succeeded 'Ulveva' at Sherborne (St. John), William Mauduit at Fifield, Siric the chamberlain at Farley, 'Alsi' at 'Etham,' and Bernard the chamberlain at Harbridge. In Wilts we meet with a manor 'de terra Ulvevæ beteslau' (fo. 74*b*), and we may doubtless detect her in that 'Ulveva' who was the predecessor of the countess of Boulogne in her three Dorset manors. Mr. Freeman declared himself unable to explain 'the mysterious and Slavonic-sounding name "Beteslau," which seems also to have puzzled Mr. Edwards';<sup>1</sup> but it is doubtless of local derivation, for the Shropshire manor of Beslow appears in Domesday as 'Beteslawe' (fo. 237*b*).

From the tenants-in-chief and their English predecessors we will now turn to the 'serjeants.'

The Hampshire Survey can be made to throw some welcome gleams of light on the interesting and somewhat important subject of tenure by 'serjeanty.' We read in the *History of English Law* (I. 267) that 'serjeanty has come from one quarter, knight's service from another, socage from yet a third.' There were rules, we learn, by which 'tenure by serjeanty was kept apart from tenure by knight's service . . . and even in the middle of the thirteenth century it still had an importance which is but faintly represented by the well-known sections of Littleton's book' (I. 271).<sup>2</sup> The principle underlying this tenure is one that was widely spread in the Middle Ages. When the Crown had abundance of land to give, and when money was scarce, an estate was bestowed on a man and his heirs on condition of his filling a certain office and discharging its duties. In Domesday Book we find lists at the end of the surveys of certain counties, Wiltshire, for instance, and Dorset, Somerset also and Devon, of the 'servientes regis' entered, as a group, apart, with their names and those of their estates. But although in certain instances we can guess at their duties from their names, Domesday does not state directly what their duties were. The peculiarity of the Hampshire Survey is that men who held by serjeanty are in some cases entered separately among those who held in chief of the Crown by knight-service. It is not till Domesday reaches No. LXVIII. that it groups together seven tenants as if they were 'king's serjeants,' though it does not tell us that they were.<sup>3</sup> But as early as

<sup>1</sup> See *Liber de Hyda*, p. civ.

<sup>2</sup> See, on the whole subject, Pollock and Maitland *ut supra* (1st Ed.), I. 262-271.

<sup>3</sup> Except in the schedule of names (fo. 37*b*).

## A HISTORY OF HAMPSHIRE

No. LIII. we meet with 'William the archer' (Arcuarius), who is entered as holding half a hide in Bentley. Now in the thirteenth century we read of this holding: 'Ricardus Arch'uns (tenet) dimidiam hydam terre in Benetlegh per servicium inveniendi unum servientem cum habergello et arcu et sagittis ad custum domini Regis.'<sup>1</sup> Here then we need not hesitate to say that the Domesday tenant held by serjeanty, by the service of an archer. Were the men who are entered after him serjeants also? Their names, at least, are suggestive. Herbert and Humphrey the chamberlains, Henry the treasurer, Croch the huntsman, Geoffrey the marshal, Nigel the physician, Alvred the priest, Durand the barber, Geoffrey the king's daughter's chamberlain, all these are among them. Their styles reflect the proximity of a court, of the royal treasury at Winchester. But we must not speculate; we must prove. And in one case, at least, we can do so.

The serjeanty of marshal of the king's household is one that can be traced back with peculiar clearness to Domesday. In the Hampshire Survey we find under 'Terra Goisfridi Marescal' two manors entered, namely, 'Hibesete' (Empshott) and (East) Worldham (fo. 49), while on the same folio we read of Nutley, a manor of Henry the Treasurer: 'De hoc Manerio tenet Goisfridus Marescal dimidiam hidam quæ pertinet ibi sicut Hund' dicit.' Turning to the *Testa de Nevill*, we find (p. 235): 'Robert de Venouz tenet unam partem de Verilham per servicium in hospicio domini Regis scilicet per mariscaciam, et Rex Willelmus (I.) dedit illam Galfrido Mariscallo. Idem tenet La Flexland per idem servicium.' Again, on page 238: 'Serjantia Johannis de Wenoye in Estwerldham et Nuttel(ie) pro qua debuit portare unam virgam marescalcie per totum annum in hospicio domini regis.'<sup>2</sup> Now under Wiltshire, in the same record, we meet with the entry (p. 146): 'Pars serjantie John le Venor in Draycote que pertinet ad serjantiam suam . . . in com. Suh't.';<sup>3</sup> while in the Red Book of the Exchequer (p. 488) we read: 'Robert de Venuz (tenet) Draicote per serjantiam marescalcie.' With this clue we turn to Domesday, and among the lands of 'the king's serjeants in Wiltshire we duly find Draycote, a five-hide manor, held by 'Goisfridus' ('Goffridus Mariscalcus' in the geld-roll). This then was no other than 'Geoffrey the marshal,' of Hampshire, who held his lands in that county, together with Draycot in Wiltshire, by the serjeanty, it is clear, of acting as marshal. This Geoffrey derived the name which his family bore in England from Venoix, near Caen, and it is interesting to learn that—

Cette famille est des plus anciennes de la Normandie, et l'une de celles qui se sont fait un nom propre du titre de leurs fonctions. Elle possédait un fief à Venoix

<sup>1</sup> *Testa de Nevill*, p. 235. The serjeanty is similarly described on p. 232, where the service is said to be for forty days.

<sup>2</sup> So too on p. 233: 'in capite per serjantiam quod antecessores sui fuerunt marescalli de hospicio domini Regis.'

<sup>3</sup> Compare p. 155 of the *Testa*.



## THE DOMESDAY SURVEY

. . . Le possesseur du fief susdit était qualifié 'maréchal de Venoix' ou 'maréchal de la prairie,' et son fief était dit 'fief de Venoix' ou 'fief au maréchal.'<sup>1</sup>

Thus we have in Geoffrey (de Venoix) the marshal one of those cases in which a member of a family that held a certain office in Normandy was selected to discharge in England the same duties. His heir, probably his son, Robert de Venoix claimed, jointly with William de Hastings, the chief marshalship of the king's court under Henry I.<sup>2</sup> We also meet with Robert 'de Venuiz,' in 1130, as holding Draycot, Wilts,<sup>3</sup> and as paying 16s. 8d., in Hampshire 'for the daughter of Herbert the chamberlain with her dower.'<sup>4</sup>

It is not often that a tenure by serjeanty can be traced back to Domesday Book so clearly as this, yet Hampshire affords another instance. Among the group of which I have spoken as entered under No. LXVIII. (fo. 49b) we find 'Miles the porter' (*portarius*) holding two estates. Bramdean, the first of these, is found, in the thirteenth century, to be held 'de conquestu terre per custodiam gaole Wintonie';<sup>5</sup> and this enables us to identify the other as in Candover and 'Hatang.'<sup>6</sup> Moreover, even at the close of the fifteenth century, we find the manor of Woodcote (in Bramdean) 'held of the king by service of keeping the prisoners of the king's gaol of his castle of Winchester.'<sup>7</sup> Miles the porter, therefore, held his lands, in Domesday, by the serjeanty of porter service at the jail, or castle, of Winchester. Precisely similar serjeanties were annexed to the gates of Exeter, Lincoln, and Bamborough castles.

Three then, at least, of the Hampshire serjeanties can be traced back to Domesday Book. Analogy suggests that others among those who are there entered as tenants-in-chief held in chief by 'serjeanty.' The two manors of Herbert the chamberlain (fo. 48b) are held, in the thirteenth century, 'per serjantiam ad scaccarium.'<sup>8</sup> And we learn further, from the Hundred Rolls (II. 224), that this serjeanty was the interesting one of weighing the money at the Exchequer.<sup>9</sup> But the Windsors who held these lands, under Henry III., derived their name from Broad Windsor, which they held by the same tenure.<sup>10</sup> As Herbert the chamberlain had nothing to do with that Dorset manor—which was held in 1086 by Hunger, a king's serjeant, whose father Odinus 'de Windesores' occurs in the Hants Survey as a tenant of the bishop of Winchester at Farn-

<sup>1</sup> *Mémoires de la Société des antiquaires de la Normandie*, XII. 14-15.

<sup>2</sup> 'Quem magistratum Gillebertus Marescallus Henrici Regis avi patris nostri et Johannes filius ipsius Gilleberti disrationaverunt coram predicto rege Henrico in curia sua contra Robertum de Venoiz et contra Willelmum de Hastings qui ipsum magistratum calumpniabantur' (*Rot. Cart.*, I. 1, p. 46).

<sup>3</sup> Pipe Roll, 31 Hen. I., p. 22.

<sup>4</sup> *Ibid.* p. 37.

<sup>5</sup> *Testa de Nevill*, p. 237.

<sup>6</sup> *Ibid.*

<sup>7</sup> *Calendar of Inquisitions, Henry VII.*, I. p. 255.

<sup>8</sup> *Testa de Nevill*, pp. 233, 235, 242.

<sup>9</sup> 'Apud La Rode unam hydatam terre que solebat teneri de Rege in capite per serjanciam ponderandi denarios in Scaccario regis, et alienata fuit per Johannem de Wildesore tempore Regis Henrici filius Regis Johannis.'

<sup>10</sup> See Hutchins' *Dorset* (1863), II. 323-4.

## A HISTORY OF HAMPSHIRE

borough (fo. 41*b*)—we must not conclude that his Hampshire fief was held by the above serjeanty in 1086.

The case, however, is different with the tenure of Hartley Mauditt. This manor was held by the Mauduits under Henry III. ‘per serjanteriam camar[ariæ] Domini Regis,’ ‘per camerariam ad scaccarium,’ or ‘per servicium camar[ariæ] Domini Regis.’<sup>1</sup> It had been held by William ‘Malduith’ in 1086 (fo. 47*b*), and I have elsewhere shown that the chamberlainship of the Treasury, afterwards the Exchequer, with the tenure of the lands thereto appurtenant, can be carried back to this Domesday tenant.<sup>2</sup> Included in those lands was Porchester, where, under Henry II., we find treasure stored on its way to Normandy. One is tempted to see in this practice the reason why Porchester was held by the Domesday chamberlain of the Treasury. In any case we find in this serjeanty a link with our national administration under the Norman kings.

Before leaving this subject of serjeanty we may note that while the Hampshire Survey proves, as was observed above, that men may have sometimes held by serjeanty though entered separately in Domesday Book among the tenants-in-chief, the inference that Domesday did not recognise any clear distinction between tenure by serjeanty and tenure by knight service might be reasonably challenged. For Richard Sturmi (or Sturmid), who is entered separately under Hampshire (fo. 48), is found under Wiltshire, entered separately as tenant-in-chief of ‘Cuvlestone’ (fo. 73), and yet he also there figures among the ‘king’s serjeants’ as holding Burbage (where his predecessor, as at ‘Cuvlestone,’ was Ælfric) with other manors, in one of which his predecessor was, as in Hampshire, Ordwold.<sup>3</sup> At first sight, this obviously implies that Domesday did recognise the two tenures as distinct. And yet, when we turn to the *Testa de Nevill* (p. 143), we read that ‘Galfridus Sturmi tenet terram suam in Burbach, Durle et Cuvelesfeld pro foresta de Savernac custodienda et per unum servientem ad haubergum’; and again, ‘Galfridus Esturmi tenet in Cuvelesfeld de Domino Rege 1 car. per serjantiam’ (p. 148). As Cowesfield (‘Cuvelesfeld’) was the ‘Cuvlestone’ of Domesday,<sup>4</sup> it follows that the whole Sturmi estate, in Wilts, was held by serjeanty, although part of it, as observed above, is entered separately in Domesday among the fiefs of the tenants-in-chief.

As has been shown by Professor Maitland, the more important of the Boroughs occupy, in Domesday Book, a position apart.<sup>5</sup> In the Hampshire Survey we have to lament the total omission of Winchester; but this, perhaps, as in the case of London, is a tribute to the greatness of its position. Indeed, an incidental notice, in the Domesday entry on Exeter (fo. 100), classes it with London and with York. Southampton is

<sup>1</sup> *Testa de Nevill*, pp. 231, 235, 236.

<sup>2</sup> *The Commune of London and other studies*, pp. 81–83.

<sup>3</sup> Compare p. 416 above.

<sup>4</sup> Jones, *Domesday of Wilts*, p. 211.

<sup>5</sup> *Domesday Book and Beyond*, pp. 176–178.



## THE DOMESDAY SURVEY

entered in the great Survey separately from the rest of the shire, and immediately before the account of the Isle of Wight. We learn little from the entry, and there is some reason to suspect that the figures in the first paragraph may not be quite accurate. Seventy-six tenants are assigned to the king in his demesne, but Domesday at once proceeds to account for seventy-nine; and although their aggregate render is given as £7, the details amount only to £2 5s. 0d. The chief point of interest in the entry is its witness that here, as at other towns along the South Coast, the Conquest had been followed by a marked increase in the local householders. Sixty-five 'Frenchmen' and thirty-one English had settled in the Borough 'since king William came into England,' bringing about an increase of £4 0s. 6d. in the royal dues. But these, even at that time, must have been considerably larger than we should gather from Domesday,<sup>1</sup> if, within seventy years of the Survey, the Crown was able to 'farm' the borough for some £300 'blanch,' a then enormous sum.

This conclusion may well serve as a warning against the rash use of Domesday Book for statistical purposes. The industry of Sir Henry Ellis compiled for each county a classified list of the population entered in the Great Survey,<sup>2</sup> but a census of the whole people was not comprised within its scope, and even on the actual holders of land its evidence, as I have explained above (p. 422), may be at times misleading. But the broad results obtained by the calculations of Ellis may be used to some purpose for the agricultural classes. He reckoned that in Hampshire and the Isle of Wight there were 4,000 'bordarii,'<sup>2</sup> almost that number of 'villani,'<sup>3</sup> and just over 1,700 serfs. The admirable maps in Mr. Seebohm's *English Village Community* show us at a glance that, on this basis, the proportion of serfs in Hampshire, and especially in the Isle of Wight, was substantially higher than in Berkshire and in Surrey, and four or five times as high as in Sussex. In Wiltshire, Dorset, and Somerset it was about the same as in Hampshire. Some half a dozen 'Radchenistri' are found on royal manors; the character of this class is as yet somewhat obscure.<sup>4</sup> Of the 'small but interesting class' of *coliberti*, as Professor Maitland terms them, there were, in Hampshire, close on a hundred; and he points out that an entry on fo. 38b identifies them with the 'burs' (boors).<sup>5</sup> To one class, which must have been of some importance in Hampshire, that is the foresters, Domesday has but allusions. Its omission of their numbers from its reckoning affords a further proof of the caution with which it should be used for an estimate of the population.

The woods and forests of the county were of value to its holders of land in more ways than one. Their primary value consisted in the pannage they afforded for the great herds of swine, which were at that time a leading feature in the rural wealth of England. It was by this standard that the value of the woodland was gauged, the full formula being found once (fo. 50) in the local Survey: 'tantum silve unde exhibant xx porci

<sup>1</sup> Compare p. 409 above.

<sup>2</sup> *Introduction to Domesday Book.*

<sup>3</sup> See, for these classes, *Domesday Book and Beyond*, pp. 38-41.

<sup>4</sup> *Ibid.* p. 66; and *History of English Law*, I. 266, 269.

<sup>5</sup> *Ibid.* pp. 36-38.

## A HISTORY OF HAMPSHIRE

de pasnagio.' This is usually cut down to 'unus porcus de pasnagio' (fo. 38), or 'silva de x porcis' (fo. 38), and so forth. In addition to this tribute of swine from the herds fed in them, the forests produced for their lords honey from the wild bees, wood for building and for fences, and rough pasture for the cattle (fo. 38*b*). Among the other sources of revenue found in Hampshire are the river-meadows, valuable for their hay, the water-mills—with which is often associated a 'render' of eels, doubtless from their pools—fisheries, and salterns. These last were generally situated round inlets of the sea,—like the modern saltworks on the Newtown river in the Isle,—and are found, for instance, at Bedhampton (where they were specially valuable), Cosham, Eling, and, it would seem, on the Yar, where there is still a Saltern Wood. Those assigned to Boarhunt and to Bowcombe (in the heart of the Isle of Wight) must, one would think, have been detached appendages. A peculiar source of revenue is mentioned in the Isle of Wight, where a piece of land rendered six ploughshares to the Crown, and two other pieces three ploughshares each (fo. 39*b*, 53).

When we turn from the evidence of the Survey on matters of economics and statistics to that which it affords on law and tenure, we obtain more direct and more trustworthy information.

Contested titles form an interesting and an instructive feature of the great Survey. But to the compilers of Domesday Book they presented great difficulty. Sometimes, as in the case of Lincolnshire, we find a special section of 'Clamores' forming an appendix to the local Survey; but in Hampshire these 'claims' are entered upon no system. On the fief, for instance, of Ralf de Mortimer, his title was contested by others in more than one instance; and yet we have to learn this from entries under other fiefs. A note at the end of the account of the great manor of Chilcomb, belonging to the bishop and the Old Minster, informs us that, 'T.R.E., there belonged to this manor six hides, which are now held by Ralf de Mortimer; but he renders (*facit*) no service to the church' (fo. 41). On the fief of Ralf de Mortimer (fos. 46*b*, 47) we identify these six hides as in Otterbourn (4), Headbourne Worthy (1), and Swampton in St. Mary Bourne (1), over all which the bishop and Minster claimed to have held rights and reversions, though Cheping, Ralf's predecessor, had been their actual tenant, T.R.E. Again, a five-hide manor in Anne is entered (fo. 47) as Ralf's without question, and his predecessor is given as Edric; but on Hugh de Port's fief we read (fo. 45*d*) under his manor of Anne: 'To this manor belonged five hides which are (now) held by Ralf de Mortimer: a brother of Edric held them on the terms that, so long as he behaved well towards him, he should hold the land of him,' etc. Hugh de Port had another grievance. Under Houghton (fo. 45) we find this strong entry in his favour:

Ad opus hujus manerii calumniatur ipse Hugo iii masuras et angulum prati et unam virgatam et v acras terræ super Turstinum camerarium. De hoc fert testimonium totum hund[ret] quod antecessores ejus inde saisiti erant et tenentes die quo rex E. fuit vivus et mortuus.



## THE DOMESDAY SURVEY

And yet Turstin the chamberlain is entered, under his solitary manor of Houghton (fo. 48), as the undisputed holder of 'one virgate and five acres of land,' which seem to be the holding in dispute. Such a case as this may serve to illustrate 'the beatitude of possession.'<sup>1</sup>

On the other hand, though William Mauduit claimed a hide in Bramshott, a manor of Edward of Salisbury, as appurtenant to Hartley Mauditt, the claim is entered under Edward's fief, not under that of William (fo. 46b). It would seem, therefore, that the Domesday clerks had no fixed system of dealing with these claims. In one instance a reeve (*præfectus*) of the king, claimed that the king's own brother, Robert count of Mortain, had encroached on the great royal manor of King's Sombourn (fo. 39b). Here again the claim is entered under the latter manor, and not under that of count Robert (fo. 44b). So too the monks of St. Swithun are found under their own fief (fo. 41b), charging Ralf de Mortimer with depriving them by violence (*per vim*) of land appurtenant to Droxford on which they were still responsible for the 'geld.'

The subject of these contested titles leads us to consider the light they throw on the law and the land tenure of the eleventh century in England. In life interests and reversions we find, in Domesday Book, a fruitful source of these disputes. For the Norman was apt to assume that his predecessor's title was absolute. This was the case with religious houses no less than with lay tenants. Hampshire affords an instance of this in the long Domesday entry on a Hayling Island manor. The monks of the Old Minster claimed that queen Emma had bestowed on them this manor and had given them immediate seisin of a half, while she allowed a certain Wulfward to hold the rest for his life only, with reversion to the Old Minster. Wulfward 'held it of' them, as the monks put it, till his death, in king William's reign;<sup>2</sup> but William gave the manor to the great abbey of Jumièges.<sup>3</sup> Domesday not only enters the abbey as in possession, but records that Wulfward, the previous holder, 'tenuit de Eddid regina in alodium.' The English monks' claim is appended to this entry, with a note that Æthelsige abbot of Ramsey and the whole (court of the) Hundred testify that the claim is just. Possession, however, carried the day, though the Old Minster's claim was not finally disposed of till the days of Stephen, when, at the prayer of Pope Innocent, and 'in consideration of the poverty of the abbey of Jumièges,' the princely bishop and his monks released at last the claim.<sup>4</sup> A curious letter from archbishop Theobald, about 1150,<sup>5</sup> shows him, like abbot Æthelsige in

<sup>1</sup> On the attitude of the Domesday scribes towards these contested titles, see my *Feudal England*, pp. 22-24.

<sup>2</sup> 'Hoc manerium calumniatur monachi de episcopatu Wintoniensi eo quod Imma regina dedit illud æcclesiæ S. Petri et S. Suuithini, et tunc de medietate monachos saisivit. Aliam vero medietatem Uluuardo in vita sua tantum ita dimisit quatinus post obitum suum ipse sepeliendus et manerium rediret ad monasterium. Atque ita Uluuard de monachis partem manerii tenuit donec mortuus fuit T.R.W. (fo. 41b).

<sup>3</sup> See my *Calendar of Documents preserved in France*, No. 1423.

<sup>4</sup> *Ibid.* No. 157.

<sup>5</sup> *Ibid.* No. 158.

## A HISTORY OF HAMPSHIRE

1086, giving his personal testimony, and stating that the Norman monks had promised 100 marcs (£66 13s. 4d.) to secure the undisturbed possession of this Hampshire manor.

The purchase from the New Minster of a life interest in Lomer T.R.E. is recorded in Domesday (fo. 43), and alleged by the Old Minster in the case of Swampton (fo. 47). In this latter instance, however, the Hundred (court) declared its ignorance of the transaction, though asserting that the manor had always been the Minster's and was 'held of' the bishop and monks in the days of king Edward. The lease for three lives, which was usual on church lands, occurs in the case of (Headbourne) Worthy (fo. 46*b*), Domesday recording the right of the Old Minster to its reversion on its then tenant's death. Other points of law and tenure receive illustration in Hampshire. The *retrait lignager* is perhaps, though not probably, hinted at, in a redemption of lands 'from earl William' by the next of kin of the previous holders (fo. 50). A curious entry that a certain thegn had not 'sought out the king' on the death of his uncle and guardian (fo. 50*b*) suggests that he ought to have obtained a fresh grant from the Crown. On the other hand a thegn who still held, as he had done before the Conquest, half a hide in Rockbourn (fo. 50) seems to have found 'king Edward's seal' a good title to his land. The sheriff's officers claimed it as 'belonging to the king's ferm'—that is, as among the sources from which that ferm is raised—'but the Hundred and the Shire say that king Edward gave it him and that he has his (writ and) seal for it.' This, therefore, was clearly deemed to constitute a valid title. The point is worth noting.

It will be observed that although the Survey was based on returns in the courts, and by the jurors, of the Hundreds, the witness of the Shire also is here recorded. Of this there are other cases: William Mauduit makes a claim; <sup>1</sup> 'et hoc testatur Hund[ret] et scira' (fo. 46*b*). In the very remarkable Chardford case <sup>2</sup> Hugh de Port's tenant 'suum testimonium adduxit de melioribus et antiquis hominibus totius comitatus et hund[ret].' It is no Hundred, but the Shire itself, which makes the strange charge that the New Minster 'has wrongfully accepted' Alton from the king in exchange for the king's house (in Winchester), 'because the house was (already?) the king's' (fo. 43). It is the shire again which professes ignorance as to the title of the English tenant of Oakhanger, but which bears witness against a claim of the king's reeve therein (fo. 49*b*). In one particularly gross case of aggression by a Norman lord—who had robbed the nuns of Winchester of their Itchen manor (fo. 48)—Domesday tells us that 'the whole Hundred and, more than that, the whole Shire (*vicecomitatus*) bears witness that it was, and ought to be, the abbey's.' Such entries as these plainly imply that the Domesday 'barons' sat in a county court. It might even be said that they heard pleas; but they seem to have done so only to the end that they might report the matter to the king himself for his decision.

<sup>1</sup> See above, p. 435.

<sup>2</sup> See below, pp. 437, 439.



## THE DOMESDAY SURVEY

This Itchen instance is a case in point. Against the entry of the claim made by the despoiled nuns we find the terse marginal note : ‘Rex Willelmus reddidit eidem ecclesiæ.’ This can hardly be other than a subsequent addition to Domesday,—or at least to the text of the return,—in which case it is of special interest. One is tempted to suspect another such addition in the words ‘Rogerius Pictavensis habet modo,’ appended to the marginal entry on fo. 39*b*, which begins with the words ‘Rex tenet.’<sup>1</sup> The position of Roger at the time of the Survey is one of the puzzles of Domesday ; for while he had then ceased to hold his lands in Derbyshire and Cheshire, his Yorkshire fief, which is strangely entered (fo. 332), included lands which had been previously held by two Norman tenants-in-chief. The above Hampshire entry, therefore, deserves attention.

Returning to the entries of legal interest, we find the Hundred impugning the title of a thegn who held a substantial estate in Tytherley :—

Dicunt homines de Hund[ret] quod nunquam viderunt sigillum vel legatum regis qui saississet Alwinum Ret antecessorem ejus qui modo tenet de isto manerio ; et nisi rex testificetur, nichil habet ibi. Duo ex his qui tenuerunt occisi fuerunt in bello de Hastings (fo. 50).

The estate had been held, before the Conquest, as three manors, by three ‘freemen’ ; and the flaw suggested in the title, it would seem, is that two of these had forfeited their lands, having fallen at the Battle of Hastings, and that there had been no evidence of the Crown having granted out those lands anew. Another entry is chiefly of interest for its curious anticipation of the principle of ‘Novel Disseisin.’ Eldred, the brother of Ode of Winchester, claims a virgate at Compton :—

Et dicit se eam tenuisse die qua rex E. fuit vivus et mortuus et disaisitus fuit postquam rex W. mare transiit, et ipse dirationavit coram regina. Inde est testis ejus Hugo de Port et homines de toto hund[ret] (fo. 48*b*).

This is one of the notable allusions to pleas taking place before queen Matilda ; but the point on which I would now dwell is that what Eldred had succeeded (according to Hugh de Port and the jurors of the Hundred) in proving before her was he had been disseised ‘since king William crossed the sea.’ The issue, therefore, must have been the same as that which in later days was raised in an action of Novel Disseisin. Lastly, one must touch again on the striking Chardford entry (fo. 44*b*), in which the witness ‘de melioribus et antiquis hominibus totius comitatus et hundret’ is contrasted with that ‘de villanis et vili plebe et de prepositis.’ In another passage Domesday appeals, in like fashion, to what the ‘meliores homines totius comitatus’ testify (fo. 177). But in the precious Hampshire entry we are given the further information that while the common folk are ready to swear or to go to

<sup>1</sup> A slight gap separates the above four words from the rest of the entry, but they seem to be written in the same hand.

## A HISTORY OF HAMPSHIRE

the ordeal (*judicium dei*), their betters 'will accept no law but that of king Edward until the matter be decided by the king.'<sup>1</sup>

No fewer than four instances of the *maritagium*, or marriage portion,<sup>2</sup> are found in the Hampshire Domesday. We read of William de Perci's solitary manor in the country (fo. 46b) that he 'received it with his wife.' From a charter of this great Yorkshire feudatory to St. Hilda's abbey, Whitby, we learn that the name of his wife was Emma de Port;<sup>3</sup> and as his heir Alan de Perci held a knight's fee of John de Port in 1166,<sup>4</sup> and his later heir William de Percy a knight's fee of Robert de St. John, under Henry III., in Hambledon,<sup>5</sup> we are able to assert that the Domesday 'Ambledune' had formed part of the fief of Hugh de Port, and had been given by him 'in marriage,' to William de Perci. Yet Domesday represents the latter as an independent tenant-in-chief, and does not in any way connect the manor with the house of Port. On the other hand, 'Wergeborne' (Warnborough), which was similarly held 'in marriage,' is entered under the fief of Hugh the son of Baldric, and Guy (de Craon) appears only as its under-tenant ('Wido de eo cum filia ejus').<sup>6</sup> In 1167 it appears as 'Waregeburna Widonis,'<sup>7</sup> and under Henry III. we find it, as 'Warneburn,' held *in capite* of the king by Petronilla de Vaux, the heiress of the house of Craon.<sup>8</sup> The third case is that of 'Odecote' (Woodcote) which is entered as the only manor held by William Belet as a tenant-in-chief, and of which we read: 'Faderlin [tenet] de eo cum sua filia' (fo. 48b). The fourth case is that of Newton Stacey, the solitary holding of William son of Manne (fo. 48b), of which we read: 'William received this land with (his) wife.' The point to be observed here is that, in these four cases, the manors were all similarly held 'in marriage'; and yet Domesday, in the first and fourth cases, enters the husband as an independent tenant-in-chief of the king, while, in the other two, he appears only as an under-tenant of his father-in-law. What makes the matter stranger still is that the first case of the four is precisely the one in which the manor is afterwards most clearly found to be held of the heirs of the wife's family. One is, therefore, tempted to suggest that Domesday is here inconsistent, and that William de Perci ought to have been entered as a mere under-tenant on the fief of Hugh de Port.

In *Feudal England* (pp. 16-27) I have laid stress on the great value of parallel passages, and even of duplicate entries in Domesday Book itself, for the understanding of the Great Survey. They take us, as it were, behind the scenes and show us something of the scribes' work. For

<sup>1</sup> This entry was styled by Mr. Freeman 'one of the most instructive passages in all Domesday.' See also *Domesday Book and Beyond*, p. 52.

<sup>2</sup> See Pollock and Maitland's *History of English Law*, II. 15-17.

<sup>3</sup> Her house at Winchester is entered in the first Winton Survey, p. 534.

<sup>4</sup> *Red Book of the Exchequer*, p. 206.

<sup>5</sup> *Testa de Nevill*, p. 230.

<sup>6</sup> See, for this instance, the remarks on the addition of this entry to the MS. on p. 444. below.

<sup>7</sup> Pipe Roll 13 Hen. II., p. 187.

<sup>8</sup> *Testa de Nevill*, p. 233. On p. 235 it is held, as 'Vargeburn,' by her husband, Oliver de Vaux.



## THE DOMESDAY SURVEY

Hampshire there are no cognate MSS. as there are for Cambridgeshire and Devon; and we have not, therefore, the assistance that parallel passages afford. But we have, I think, a duplicate entry. When it is remembered that the Domesday clerks had to reconstruct the Survey of a county—which reached them as returns for each Hundred, and which they had to rearrange under the names, instead, of each tenant—it will not be matter for surprise that entries were sometimes duplicated, omitted, or misplaced in the process of re-arrangement. Though these cases are marvellously few, we cannot doubt that this is one :<sup>1</sup>

Hugo de Port tenet CERDEFORD, et Willelmus de eo. Duo liberi homines in alodium tenuerunt pro ii maneriis de rege Edwardo. Tunc et modo geld[abat] pro v hidis. Terra est iiii carucis. In dominio sunt ii carucæ et xx bordarii et iv servi cum i caruca, et quater xx<sup>ti</sup> et xi acre prati. T.R.E. et modo valebat iiii lib. Cum recepit, c solidos.

Isdem Willelmus tenet de Hugone unam virgatam et dimidiam in CLATINGES. Duo liberi homines tenuerunt de Alwino. Sed non fuit alodium. Ibi ii bordarii et vi acre prati. Valuit x solidos. Modo viii solidos (fo. 44b).

Ipse Hugo tenet CERDEFORD, et Willelmus de eo. Duo liberi homines tenuerunt de rege Edwardo in alodium. Tunc et modo geld[abat] pro v hidis. Terra est iiii carucis. In dominio sunt ii carucæ et xx bordarii et iv servi cum i caruca et c acre prati ix minus. Silva de ii porcis. T.R.E. valebat c sol., et post et modo iiii lib.

Ipse Hugo tenet unam virgatam terre et dim. in CLATINGES, et Willelmus de eo. Duo liberi homines tenuerunt de Alwino. Sed non fuit alodium. Ibi sunt ii bordarii et vi acre prati. Silva inutilis. Valuit x solidos. Modo viii solidos (fo. 46).

It will at once be seen that the Domesday scribes did not merely copy the words before them: the figures for the Chardford meadows are on this point decisive. Again, the 'post' of one entry is the 'cum recepit' of the other; and from this we learn further that the two were deemed synonymous. The first entry, under both the manors, omits mentioning the woodland; the second, on the other hand, omits as surplusage the words 'pro ii maneriis,' though inserting 'terre' (after 'virgatam'). The one real discrepancy between the two entries is that while the first gives, as the successive values of Chardford, £4, £5, £4, the other enters them as £5, £4, £4. This can hardly be other than a slip.<sup>2</sup>

The investigation of this example will prepare us for that variation of formula which is one of the characteristics of the Survey that it is essential to bear in mind.

It is a singular circumstance that we find in the Hampshire Survey what are perhaps the two extremes in the phrases used by the Domesday scribes to denote the reign of Harold. We read of half a hide at Tatchbury, that Ezi the sheriff, whose name occurs often in the Survey, 'after the death of king Edward, gave it to the said minster for (the weal of) his soul, before king William had come' (fo. 43). In most striking contrast to this courtly evasion, we find on fo. 38 the phrase, believed to be unique, 'when Harold was reigning.' This latter phrase is the more remarkable from the fact that, only a few lines higher up in

<sup>1</sup> See below, p. 445, for the explanation of this double entry.

<sup>2</sup> The entries on 'Sudtune' (Sutton Scotney) on fos. 46b, 49b are absolutely identical, save for the names of the tenants T.R.E. and in 1086. They perhaps represent a double claim, but possibly also they relate to equal shares in the manor.

## A HISTORY OF HAMPSHIRE

the same column, Harold's reign is spoken of as an act of lawless aggression ('quando regnum invasit').

Nowhere is this variety of phrase more remarkable or more misleading than in the formulas relating to that obscure subject, the præ-conquestual lordship of the soil. Phrases describing the tenure of land before the Norman Conquest are of frequent occurrence in the Hampshire Survey. The English predecessor of the Norman tenant had held his lands on certain terms which regulated those on which his Norman successor held them. For, in theory, the latter had but stepped into his predecessor's shoes. The salient impression derived from Domesday is that the great distinction between the previous tenures was found in the tenant's power to take certain action. Was he free, or was he not, to take certain action? Such was the question put to those who had knowledge of the facts. Now, the language used by Domesday to describe that action is, at first sight, misleading. We read, in Hampshire, of the old tenants, either that 'quo voluit ire potuit,' 'quolibet ire potuit' (fos. 45, 47*b*), or that 'non potuit ire quo voluit' (fo. 40), 'non potuit ire quolibet' (fos. 40, 41, 48), 'non potuit ire alicubi' (fos. 40, 41, 45), or again that 'non potuit recedere quo voluit,' 'nec alicubi recedere poterant' (fo. 38). Such phrases as these appear to refer to the liberty of personal movement; but here and there the text becomes more explicit. Between Picot and William de Chernet a definite issue is raised; the former claims, and the latter denies, 'quod ille qui tenuit terram liber homo fuit et potuit ire cum terra sua quo voluit' (fo. 44*b*). At Mitcheldever, similarly, four 'liberi homines . . . nequierunt recedere cum terra sicut testantur homines ejusdem hund[reti]' (fo. 42*b*); Wulfward, who had held Crofton, 'quo voluit ire cum hac terra potuit' (fo. 44). The tenant could not merely 'go': he was free to go 'with his land.' And another entry takes us further. On the great episcopal manor of Chilcombe the old tenants 'non poterant cum terra recedere ad alium dominum' (fo. 41). This is merely a fuller form of the phrase we find on the opposite page (fo. 40*b*), where we read that the bishop's tenants at Fareham 'ab episcopo recedere non poterant.' What the tenants, in either case, were not free to do was to 'commend'<sup>1</sup> the land to another lord, and so to give him rights over it. Obscure as this subject is to us, parallel texts have enabled me, for Cambridgeshire, to establish certain points. I have shown that 'recedere,' 'recedere cum terra,' 'recedere sine licentia,' and 'vendere' are all used as equivalents,<sup>2</sup> while 'dare et vendere' equates 'recedere cum terra sua.'<sup>3</sup> In Hampshire we find an instance of the formula 'non potuit ire quolibet absque licentia ejus' (fo. 44*b*), but the last three words are otherwise omitted and seem to have been deemed superfluous. In the test case referred to above (p. 439), it seems to be assumed that if a man could 'go with his land where he would' under Edward the Confessor, there were no rights over him to which a Norman could succeed. William

<sup>1</sup> On such 'commendation,' see Maitland's *Domesday Book and Beyond*, pp. 69-75.

<sup>2</sup> *Feudal England*, p. 22.

<sup>3</sup> *Ibid.* pp. 24-26.



## THE DOMESDAY SURVEY

de Chernet appears to have claimed that the English holder had not the power of doing this, and that, consequently, rights over him had been inherited by Hugh de Port from the latter's predecessor at 'Clatinges.' The Hampshire Survey, one may add, illustrates the use of 'ire' as equivalent to 'recedere,' and throws light on the practice of commendation by telling us that a man held his land T.R.E. 'sub Wigoto pro tuitione' (fo. 50*b*). To avoid using misleading terms I have rendered 'ire' and 'recedere' by 'betake himself,' in my translation, as that phrase seems applicable to the above practice of commendation. Indeed, its exact equivalent is found in one passage of the Hampshire Domesday, where the formula employed is 'non potuit se vertere ad alium dominum' (fo. 47).

A tenure conspicuous in Hampshire is that described as 'allodial,' a word derived from the French *alleu*. Beyond noting that this tenure is distinctive of a certain district, Hampshire and the counties to the east of it, little can be positively said of its character.<sup>1</sup> One would assign to it the highest place in the scale of free holding, were it not that, in one instance (fo. 52*b*), we read of seven 'alodiarii,' who held of the bishop of Winchester, 'nec poterant recedere alio (*vel* ab illo).'

Tenure 'in parage' is of frequent occurrence in the Hampshire Survey. Where a group of men is entered as so holding, their shares in the land would be equal, whether arising from a heirship or from some other cause.<sup>2</sup> But the case of one man holding 'in paragio' is less easy to explain. Professor Maitland has suggested that this man would be the one of the 'pares,' or parceners, who was answerable to the king or lord for the services from the whole holding.<sup>3</sup> On the other hand, a well-known antiquary, Mr. F. M. Nichols, who has studied the Hampshire Survey, has suggested to me that the terms 'in alodium' and 'in paragio' were used alternatively for the same tenure, and that their choice depended largely on which Hundred Court it was that made the return. I do not think it is possible to treat these terms as identical in meaning, for, apart from Professor Maitland's arguments, such a phrase as 'alodiarii tenuerunt in paragio' (fo. 50*b*) would then become meaningless<sup>4</sup>; but their distribution in the Hampshire Survey is certainly deserving of attention. It can hardly be a mere coincidence that among the English thegns (fos. 50-50*b*) there are 27 cases of their predecessors holding 'in alodium,' and not one of a holding 'in paragio' until we come to the forest Hundred of 'Rodbrige,' in which, with the forest section which follows it (fos. 50*b*-51*b*), there are 33 holdings 'in paragio,' and not one 'in alodium.' Passing on to the Isle of Wight (fos. 52-54), we have 15 tenures 'in paragio,' followed by 23 'in alodium,'

<sup>1</sup> See, for this tenure, Maitland's *Domesday Book and Beyond*, pp. 153-4, 256.

<sup>2</sup> 'Wallope' (fo. 50) was held in 1086 by 'four Englishmen,' whose father had held it 'in alodium.' Several forest manors were held by 'the sons of Godric Malf,' having been held by their father. But in neither of these cases is the tenure, in 1086, entered as 'in paragio.'

<sup>3</sup> *Ibid.* p. 145.

<sup>4</sup> This is also the view of Sir F. Pollock.

## A HISTORY OF HAMPSHIRE

then 11 'in paragio,' followed by 7 'in alodium,' and lastly 5 'in paragio.' In the Island manors entered on fos. 39b-40, the whole fourteen tenures T.R.E. are 'in alodium.'<sup>1</sup> Here, again, it is obviously no mere coincidence that, on the king's manors in the island, only tenures 'in alodium' are found on fos. 39b-40, and only tenures 'in paragio' on fos. 52-52b. If these terms, as urged above, were not used merely for variety, they must possess some meaning as yet undiscovered.

Another point of tenure illustrated by the Hampshire Survey is the holding of 'manors' and of 'halls.' We find entries of estates held, not only as a manor, or as two manors, but even as 'half a manor' (fo. 45b). And the still obscure 'manor' of Domesday is clearly connected with its 'hall.' On fo. 50b we read that 'Stanes' had been held, before the Conquest, 'in paragio' by two Englishmen, of whom 'each had a hall.' On the great episcopal manor of Crondal (fo. 41), two Englishmen (who, it should be noted, 'could not betake themselves anywhere') held Itchell and Cove 'in paragio,' each of them having a hall. 'When German (the Norman tenant) received it, there was but one hall.'<sup>2</sup> Of Milbrook, which belonged to the Old Minster, we learn that 'villeins held it and hold it; there is no hall there' (fo. 41b). What this implies we may gather from the case of Alverstoke, another of St. Swithin's manors, which, we read, 'villeins held and hold' (fo. 41b). For this, we find, was one of those instances in which, from an early period, church estates were 'farmed' by the villeins resident thereon.<sup>3</sup> It should be observed that at Milbrook and Alverstoke we find villeins only, and not, as on the normal Hampshire manor, 'bordars' also. It is a singular fact that at Brighton and some villages in its neighbourhood Domesday shows us some lay lands which had been held by villeins T.R.E.

Some of the observations I have made in the pages preceding seem to require a brief discussion of that portion of Domesday Book which contains the Survey of the county.

It was urged by Mr. Moody, in his useful work, *Hampshire in 1086*, that this Survey is not exhaustive. But we should hesitate to accuse Domesday of omissions in view of the fact that it often treated a whole district as a single manor. This was specially the case with the old royal 'manors' (as in the adjacent county of Dorset<sup>4</sup>) and with those held, from an early period, by the church. The monograph on the bishop's manor of Crondal issued by the Hampshire Record Society illustrates this practice, while Professor Maitland's brief sketch of 'the great Chil-

<sup>1</sup> These figures, it is hoped, are substantially correct. See further the notes to these manors in the text.

<sup>2</sup> Compare Prof. Maitland's remarks on the hall and the manor in *Domesday Book and Beyond*, pp. 109-110, 124-125.

<sup>3</sup> See *Remarks on the Common Seal of the men of Alverestoke* in Winchester volume of the Royal Archæological Institute (pp. 111-115); and compare my *Calendar of Documents preserved in France*, p. 3 (No. 11). Reference may also be made to Vinogradoff's *Villeinage in England*, pp. 182, 360, and Maitland's *Domesday Book and Beyond*, pp. 58, 146. The above interesting Hampshire cases appear to have been unknown to these writers.

<sup>4</sup> See Eyton's *Dorset Survey*, p. 79.



## THE DOMESDAY SURVEY

combe estate of the church of Winchester, which stretched for many a mile from the gates of the royal city of the West Saxon Kings,' is also instructive upon this point.<sup>1</sup>

It is even possible that the Hampshire evidence may prove of high importance in its bearing on Professor Maitland's new doctrine of the manor.<sup>2</sup> This is not the place in which to discuss his theory that the 'manor' of Domesday 'is a house against which geld is charged.' But he himself thus states a possible objection to its acceptance :—

In later days we may well find a manor holden of another manor, so that a plot of land may be within two manors. If this usage of the term can be traced back into Domesday Book as a common phenomenon, then our doctrine is in great jeopardy. But we have noticed no passage which clearly and unambiguously says that a tract of land was *at one and the same time* both a 'manerium' and also a part of another 'manerium.'<sup>3</sup>

Now we read, in Domesday, of the Old Minster's great manor of Whitchurch (fo. 41) : 'de isto manerio et de his hidis tenet Radulfus filius Seifride unum Manerium quod dicitur Frigefolc' (now Freefolk Manor). The original assessment of Whitchurch was 50 hides, but, under Edward, it was charged on 38 only ; and this had been further reduced, by 1086, to 33 hides. Why was this ? Clearly because, as Domesday states, 'of these hides' 9 were in Freefolk, and these had been reduced to 4. This would reduce the total for Whitchurch from 38 to 33. Freefolk Manor, therefore, in 1086, was itself a 'manor,' and yet, for geld, a part of the 'manor' of Whitchurch. Again, under Brown Candover, a manor of the New Minster, we read (fo. 42) : 'De ipsa terra ejusdem Manerii tenet (*sic*) Alsī filius Brixi unum Manerium, Vdemanecote, de abbacia et est (*sic*) de dominica terra.' These emphatic phrases are confirmed by the valuation of 'the whole manor,' in which Woodmancote is entered only as Alsī's 'part.' The case of Breamore (fo. 39) is less decisive, but Domesday states that it 'belongs to the "manor" of Rockbourn,' and yet was itself a 'manor'; for the words 'De isto manerio . . . duæ hidæ et dimidia' must apply to it, as Rockbourn, we read, was never 'hidata.' Under Broughton also (fo. 38b), the words 'De isto manerio' and 'De istis maneriis' should be studied in this connexion, while the fact that one of the Chardford entries omits the words 'pro ii Maneriis,' as if they were of no consequence (p. 439 above), is perhaps of some significance.<sup>4</sup> Similar cases, doubtless, occur in other counties. In Gloucestershire, for instance, the bishop and monastery of Worcester held the manor of Bibury, of which we read (fo. 164b) : 'De eadem terra hujus Manerii tenet Durandus<sup>5</sup> de episcopo unum Manerium de iii hidis et una virgata in Bernesleis et Eudo vii virgatas ibidem pro Manerio. . . . Totum manerium T.R.E. valuit xviii lib., et modo similiter. Ulstanus episcopus tenet et geldat.' Here these two 'manors' in Barnsley are so integrally part

<sup>1</sup> See *Domesday Book and Beyond*, pp. 496-498.

<sup>2</sup> *Ibid.* pp. 107-128.

<sup>3</sup> *Ibid.* p. 128.

<sup>4</sup> Compare *Domesday Book and Beyond*, p. 108.

<sup>5</sup> See p. 425 above.

## A HISTORY OF HAMPSHIRE

of that of Bibury that they are not even valued separately ; and it is the Bishop who pays the geld. The Hampshire evidence is thus confirmed.

A good deal may be learnt from the Hampshire portion of the Survey as to the difficulties experienced in compiling Domesday Book. Indeed the sight of the manuscript itself, or even of the photozincograph facsimile, would be somewhat of a revelation to those who only know the printed text. One might have expected that, working at Winchester, the clerks, in dealing with Hampshire, would have proved particularly successful. But this is not so. In arranging anew the manors under the tenants' names, they evidently made many omissions and had to correct them afterwards. Of this the salient instance is the whole additional leaf (fos. 42, 42*b*) which was certainly inserted after the text had been compiled.<sup>1</sup> On it,—written across the page instead of in double columns (as is the text itself),—are inserted the entry of the one estate held by the archbishop of York and those of some overlooked manors belonging to the New Minster. This, of course, was an extreme case ; the usual plan adopted by the clerks, where an entry had been overlooked, was to squeeze it into any blank space they could find available in the text, or, failing that, to insert it in the margin. The estate held by Mont St. Michel is huddled in on a blank space after bishop Osbern's holding ; an omitted manor of Roger Fitz Gerold is crowded into the blank space at the foot of the entry of his fief, and so is, under Hugh Fitz Baldric, a manor which formed his daughter's marriage-portion.<sup>2</sup> For this device there was no room in the case of Waleran the huntsman ; so the clerks inserted in the margin his manor they had overlooked (fo. 48*b*). Even a manor of the king himself, which had been accidentally omitted, had to be clumsily placed in the margin round the upper left-hand corner of fo. 39*b*. There will also be found omitted entries, or additions to entries in the text, inserted in the margin at the foot of fos. 43, 45*b*, and 48*b*, while on fo. 53*b* several manors of William Fitz Azor are found to be inserted at the end of his brother Gozelin's fief, a marginal note on the preceding page referring to this addition by the word 'R[e]q[ui]re.' But, apart from the overlooking of manors, another disturbing element for the text was found in those entries of 'claims' of which I speak below. The Hayling Island manor held by the Abbey of Jumièges is entered in the normal script ; but the long 'claim' which follows is in a much closer writing, as if subsequently crowded into a space too small for it. To the same disturbing element may, I am convinced, be traced the strange double beginning to Hugh de Port's fief. In the record type edition (fos. 44*b*, 45) this would not be detected, although a careful scrutiny might suggest that there was something wrong. What really happened was this. The clerks left a blank space at the foot of fo. 44*b* in order to begin this great fief at the top of the next folio. This they did, placing at its head the manor of Sherborne (St. John), which is spoken of in later records as if

<sup>1</sup> Two such interpolated leaves (76 and 81) are found in the Dorset Survey, and on both the entries are similarly written right across the page.

<sup>2</sup> See p. 438 above.



## THE DOMESDAY SURVEY

the *caput* of the barony. But they did not, under his manor of Chardford, enter an appurtenant estate to which there was a rival claim. Where were they to find room for this omitted matter? They seized upon the blank which had been left in the text immediately preceding Hugh's fief and crowded into it the Chardford entry all over again, adding to it, however, this time the story of Picot's claim. So limited was the space at their disposal that the duplicate entry in the normal script (fo. 46) takes up fifty per cent. more room. Last of all came the rubricator, who, instead of writing, as he was to have done, 'Terra Hugonis de Porth' at the head of fo. 45, wrote it before this postscript with which the account of the fief was thus made to begin.

Armed with these conclusions we can now go further and approach a subject of great importance, the New Forest in Domesday Book. With the question of the Forest, in its historical aspect, I have already dealt;<sup>1</sup> but a special study of the Great Survey reveals the singular position it occupies in that record; and with that position a Domesday expert alone is competent to deal. The first point to strike one is that the New Forest occupies in Domesday Book a position absolutely unique. It is entered by itself as a separate district, with its own schedule of holders of land, from the king downwards to the English thegns. In all England there is no district lying within the borders of a county that is treated in this fashion. And the result of this treatment was a failure. Precisely as the effort to survey the Isle of Wight separately led to the manors of the king therein being entered partly on fos. 39b-40, and partly on fos. 52-52b,<sup>2</sup> so we have a series of forest manors included in the bulk of the king's land on fos. 38b-39, though they ought, according to the system adopted, to have been entered in the 'Forest' section on fo. 51. And this remark applies also to certain manors in private hands.<sup>3</sup> But a further point is discovered only on a close examination of the record itself. The account of this district, which is headed 'In (nova)<sup>4</sup> foresta et circa eam,' has all been crowded into two pages (*i.e.*, a single leaf), with a very curious result. Precisely as, with Hugh de Port's fief, the scribes have seized on a blank space immediately preceding its entry and crowded into it further matter relating to that fief, so have they utilised a blank space immediately preceding the leaf devoted to the New Forest, to crowd into it some surplus entries which ought to have appeared on the page facing it. This would never be detected in the record type edition, where the greatest man in Hampshire, Hugh de Port, follows immediately on a long list of small English thegns. But on turning to the MS. we see at once that this entry and those which follow it are crowded closely together, and we soon discover that they really belong to the New Forest Survey on the page facing them. Moreover, on fo. 51b, the back of the New Forest leaf, we are struck by the want of space for the many entries it contains. And yet on the pages

<sup>1</sup> p. 411 above.

<sup>2</sup> See notes to them in text.

<sup>3</sup> Sway, for instance, is surveyed partly on fo. 44 and partly on fos. 51-51b.

<sup>4</sup> The word 'nova' is interlined.

## A HISTORY OF HAMPSHIRE

which follow we return to the normal script, for which there is ample room. What conclusion ought we to draw from the overcrowded state of the New Forest leaf? I do not hesitate to say that it must have been all written subsequently to those portions of the Survey which come before and after it. If it had been written, in the ordinary course, after the portion preceding it, it would have extended to, and practically covered, fo. 52. Then Southampton and the Isle of Wight would have begun on the dorse of that folio, which they might well have done, for there is abundant blank space at the end of the Hants Domesday. It was clearly because they already occupied fo. 52 that the clerks were obliged to cramp the New Forest Survey into fos. 51–51*b* (with the overflow on 50*b*). In connection with this singular discovery, it should be observed that this schedule of names of those who held land ‘in eadem Hantescire, circa novam forestam et intra eam’ (fo. 37*b*) does not come, as it should, before, but after that of the Isle of Wight. This is a further hint of the clerks’ confusion on the matter; but in any case there can be no question that, in the text as it stood at first, the Isle of Wight followed ‘Hampshire’ with only Southampton between them, and that the Survey of the New Forest was inserted by the clerks afterwards.

On the other hand, the Domesday clerks cannot fairly be blamed for the confusion arising from the invention of an imaginary Forest Hundred. The scribe, indeed, wrote ‘In Truham’ where he should have written ‘in Truham’;<sup>1</sup> but this will hardly excuse the record-type edition (1783) printing the words, by a rare error, as the name of a Hundred. Warner’s Hampshire went further, and boldly printed the words as ‘In Truham Hundredo.’<sup>2</sup> Lastly, Mr. Moody, working from this text and translation, assigned to this imaginary Hundred six holdings,<sup>3</sup> and placed it in one part of the New Forest Hundred. But if it were indeed a separate Hundred, Domesday assigns it eleven holdings scattered about the forest.<sup>4</sup> The fact is that all these, like those preceding them (fo. 51), lay in the New Forest Hundred (that of ‘Bovre’ in Domesday). ‘Truham’ itself—the ‘Thorougham’ of Leland, who held that Rufus was there slain—was, according to Mr. Moody, Fritham in Bramshaw, and, as ‘Truham,’ or ‘Trucham,’ occurs twice (51 col. 1) under the Hundred of ‘Bovre’; but in both these cases he leaves it unidentified. It is found again, in the second column of the same folio, under the Hundred of ‘Rodedic,’ where he again identifies it as Fritham. On the other hand, ‘Pistelei,’ ‘Pisteslei,’ or ‘Pisteslai,’ is identified by him, under the Hundreds of ‘Bovre’ and ‘Truham,’ on fo. 51*b*, as Pilley in Boldre, but left unidentified under ‘Rodedic’ Hundred on fo. 51. It

<sup>1</sup> On the same folio (51*b*) the scribe has made two careless slips, writing, under ‘Greteham,’ “Waleran venator tenebat modo,” and under ‘Melleford,’ “quia æcclesia pars est in foresta,” which makes nonsense.

<sup>2</sup> Vol. II. p. 272.

<sup>3</sup> Betramelei, Cocherlei, Hincelveslai, Pisteslai, Sanhest, and Truham.

<sup>4</sup> Including Nutlei (Netley in Eling) and Brocheli (Brookley in Brockenhurst).



## THE DOMESDAY SURVEY

is practically certain that 'Pisteslei' and 'Truham,' which follow one another on fo. 51, were not in 'Rodedic' Hundred at all, and that, as is the rule in Domesday, the Hundred headings are worse than useless, because their constant omission leads the student astray.

This much is revealed to the student by the photozincograph facsimile. But when he examines the record itself, as I have been specially permitted to do, he detects at once the difference in the ink, which characterises some of the additions.<sup>1</sup> This is seen in the 'Facumbe' entry on fo. 39*b*, in the marginal notes on fo. 48, and the addition at the foot of fo. 45*b*. It also differences the entry beginning 'In Neteham Hundred' on fo. 50*b* from the four entries preceding it,<sup>2</sup> with which it is unconnected; for it relates to lands which had been held by Godwine, an English thegn. To this it may be added that the same examination proves that three of the names in the schedule of holders of land (LIV.—LVI.) have been written over an erasure.

It should be hardly necessary to urge that even this searching criticism cannot detract from the great achievement represented by Domesday Book. This is not the place in which to enlarge on the boldness of conception or the vigour of execution which gave us the Great Survey. Mr. Freeman has already done this in terms of no measured praise. 'A picture of a nation,' as he has finely said, 'at one of the great turning-points of its history,' it is 'the first known statistical document of modern Europe'; and we should rather admire the success attained, than 'smile at its rudeness and imperfection.' For 'as a national possession' it stands alone.

<sup>1</sup> The effect produced by these entries resembles that of the additions to the 'Cartæ' (or 1166) in the Black Book of the Exchequer.

<sup>2</sup> See p. 445 above for these entries.

<sup>3</sup> *History of the Norman Conquest*, V, 3-49.

## NOTE

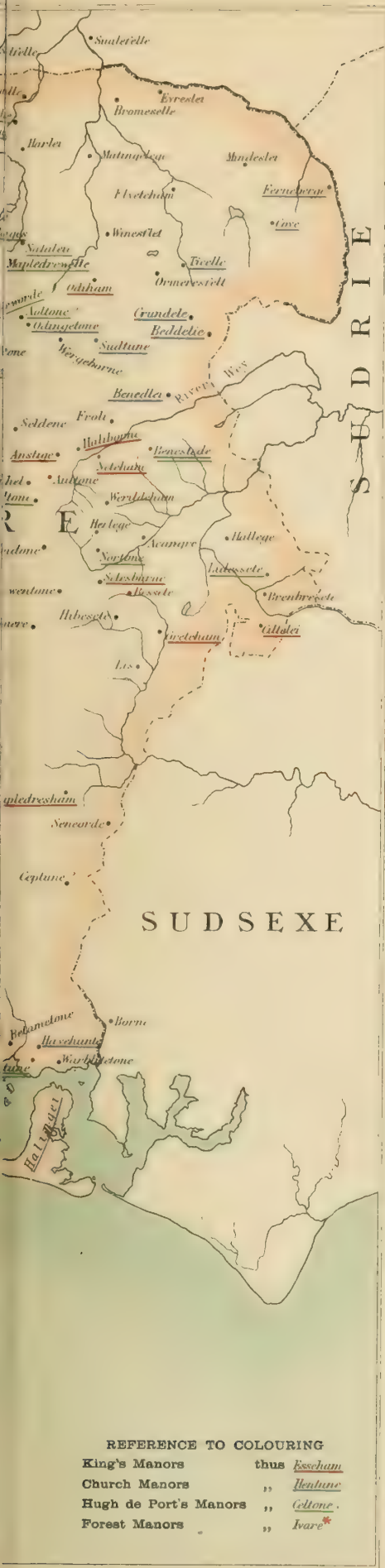
The following translation agrees in the main with that of Warner, which was excellently done, though needing revision. For the identification of places we are indebted to Mr. Moody's *Hampshire in 1086*. The Domesday names of places and persons have been carefully reproduced. For the understanding of the text it is needful to explain that 'T.R.E.' was the Domesday abbreviation for 'In the time of King Edward,' that the 'hide' was the unit of assessment on which the (Dane)geld was paid, and that the 'virgate' was its quarter. The essential portion of the plough ('caruca') was its team of oxen, eight in number. The 'demesne' was the lord's portion of the manor, the peasantry holding the rest of it under him. Caution is needed in accepting the names of the Hundreds, as the scribe sometimes places a manor under the wrong Hundred.











## NOTES TO DOMESDAY MAP

(Compiled by J. HORACE ROUND, M.A.)

IN this map those manors in which the king had an interest have a scarlet line under them; a blue line is under those in which the principal church tenants, namely, the Bishop of Winchester and his monks of the Old Minster, held land; a green line denotes those in which the greatest lay tenant, Hugh de Port, held land. In the New Forest district a mark (\*) against the name of a manor means that it is stated by Domesday to have been affected by "the Forest."

No attempt has been made to distinguish the Domesday Hundreds, partly because the rubrication of the Survey is so imperfect that it does not enable us to say with any certainty what the boundaries of the Hundreds then were, and partly because the original Hundreds had clearly been much modified by large grants to the church, and by the influence of jurisdiction and of tenure. It should, however, be observed that some of the Hampshire Hundreds in Domesday present a primitive appearance. "Efedele," or "Hefedele," comprised only Odiham, Winchfield, and Dogmersfield, a rudely rectangular block of land; and next to it, Hoddington, comprising Weston, Upton Grey, and South Warnborough, was also a compact block. In the south-west of the county, the Hundred of "Sirlei," in which were Sopley, Ripley, Avon, and Winkton comprised only the present parish of Sopley with the hamlet of Winkton (in Christchurch) adjoining it on the south. These all resemble the small Hundreds found in Sussex. The episcopal manors of Waltham, Droxford, and Fareham are entered as independent Hundreds, but this was more probably the result of their grant to the church than a relic of the primitive system.

It should be borne in mind that the place-names of Domesday are frequently very difficult to identify in the present day, especially where (as in the case of Hampshire) the manorial history of a county has not been worked out.† Mr Moody's book on the Domesday Survey ("Hampshire in 1086") has proved most useful, but some of his identifications are mistaken, and others (in the absence of his reasons for them) appear to me to be doubtful. This caution applies especially to places in the New Forest district and in the Isle of Wight.

† This Map had to be compiled before the topographical section of this History had been written.

For the convenience of the reader the modern river names are given





# HERE ARE ENTERED THE HOLDERS OF LANDS IN HANTESCIRE

I	KING WILLIAM	xxxvii	Durand de Glowecestre
II	The bishop of Winchester	xxxviii	Turstin Fitz Rolf
III	and his monks	xxxix	Bernard Pancevolt
IIII	Archbishop Thomas	XL	Turstin the chamberlain
V	Bishop Osbern	XLI	Richard Sturmide
VI	The abbot of Winchester	XLII	Richard Puingiand
VII	The abbot of Gloucester	XLIII	Gilbert de Breteville
VIII	The abbot of Westminster	XLIII	Hugh Fitz Baldri
IX	The abbot of Chertsey	XLV	Waleran the huntsman
X	The abbot of Jumièges	XLVI	Walter Fitz Other
XI	The abbot of Glastonbury	XLVII	Walter Fitz Roger de pistes
XII	The abbot of Milton	XLVIII	William Fitz Manne
XIII	The abbot of Grestain	XLIX	William Alis
XIIII	The abbess of Winchester	L	William Fitz Baderon
XV	The abbess of Romsey	LI	William Fitz Stur
XVI	The abbess of Wherwell	LII	William Belet
XVII	The canons of Twynham	LIII	William Arcuarius
XVIII	Count Alan	LIII	Herbert Fitz Remi
XIX	The count of Mortain	LV	Herbert the chamberlain
XX	Earl Roger	LVI	Henry the treasurer
XXI	Earl Hugh	LVII	Humfrey the chamberlain
XXII	Hugh de Porth of the King	LVIII	Herbrand de Pont Audemer
XXIII	The same Hugh of the bishop of Bayeux	LIX	Rainald Fitz Croch
XXIIII	Hubert de Porth	LX	Croch the huntsman
XXV	William de Perci	LXI	Gozelin de Cormeliis
XXVI	Ernulf de Hesding	LXII	Geoffrey Marescal
XXVII	Edward de Sarisberie	LXIII	Nigel the physician
XXVIII	Robert Fitz Gerold	LXIII	Alvred the priest
XXIX	Ralf de Mortemer	LXV	Durand the barber
XXX	Eudo Fitz Hubert	LXVI	Rannulf Flamme
XXXI	William Bertram	LXVII	Geoffrey the chamberlain of the king's daughter
XXXII	William de Ow	LXVIII	Hugh alabarbe and many more serjeants of the king
XXXIII	William de Braiose	LXIX	Odo de Wincestre and many other thegns of the king
XXXIIII	William de Warene		
XXXV	William Malduith		
XXXVI	Alvred de Merlebergh		

# A HISTORY OF HAMPSHIRE

## IN THE ISLE OF WITH

- |                                |                                    |
|--------------------------------|------------------------------------|
| I KING WILLIAM                 | VI William Fitz Stur               |
| II The bishop of Winchester    | VII William Fitz Azor              |
| III The church of St. Nicholas | VIII Gozelin Fitz Azor             |
| IIII The abbey of Lire         | IX Godric the priest and many more |
| V The abbey of Wilton          |                                    |

## ALSO IN THE SAME HANTESCIRE ABOUT THE NEW FOREST AND WITHIN IT

- |                             |                               |
|-----------------------------|-------------------------------|
| I KING WILLIAM              | VI Hugh de Porth              |
| II The bishop of Winchester | VII Edward de Sarisberie      |
| III Earl Roger              | VIII Rannulf Flammard         |
| IIII William de Ow          | IX Hugh and Odo and many more |
| V Ralf de Mortemer          |                               |

### fo. 38. THE KING'S LAND

#### IN EDEFELE HUNDRET<sup>1</sup>

I. King WILLIAM holds ODIHAM in demesne. Earl Harold held it. There (are) 78½ hides there. It was then assessed at (*se defendebat pro*) 38 hides; now it does not pay geld. There is land for 56 ploughs. In (the) demesne are 15 ploughs, and (there are) 137 villeins and 60 bordars with 40 ploughs. There are 50 serfs and 8 mills, worth 56 shillings and 7 pence, and 21 acres of meadow. (There is) wood(land) worth (*de*) 160 swine.

T.R.E., and afterwards, it was worth 50 pounds by tale; now 50 pounds by weight.

Of this manor 2 hides belong to the two churches of the manor, and the priest has there 1 villein with 1 plough. (This is) worth 6 pounds.

Of this manor also 2 priests (hold) 2 churches with 2 virgates of land; and they have there a plough and a half. (This is) worth 67 shillings and 6 pence.

#### IN NETEHAM HUNDRET<sup>2</sup>

The King himself holds NETEHAM [Neatham]<sup>3</sup> in demesne. King Edward held it. (The jurors) have not said how many hides are there. There is land for 52 ploughs. In

(the) demesne are 5 ploughs, and (there are) 54 villeins and 26 bordars with 47 ploughs. There are 16 serfs, and 8½ mills worth 93 shillings and 9 pence. (There is) a market worth 8 pounds, and 15 acres of meadow. (There is) wood(land) worth 150 swine.

T.R.E., and afterwards, it was worth 76 pounds 16 shillings and 8 pence. It is now valued at the same sum, and yet it is farmed (*reddit de firma*) for 118 pounds 12 shillings and 9 pence.

From this manor there has been taken (*ablata*) 1 virgate of land which Leuvin' the forester held, says the Hundred (court).

The King himself holds HALIBORNE [Holybourn].<sup>4</sup> Ulward held it of king Edward. (Assessment) then and now, one hide. There is lands for 4 ploughs. In (the) demesne is half a plough, and (there are) 6 villeins and 4 bordars with 1 plough. There are 1 serf and 5 acres of meadow. (There is) wood(land) sufficient for the fences (*ad clausuram*) and (worth) one pig from the pannage.

T.R.E., and now, (it was) worth 50 shillings; when received, 40 shillings.

The King himself holds HANSTIGE [Anstey in Alton]. Queen Eddid held it. It was then assessed at 5 hides; now it does not pay geld. There is land for 3 ploughs. There are 8 villeins with 2½ ploughs.

T.R.E., and afterwards, as now, (it was) worth 50 shillings.

The King himself holds GRETEHAM [Great-ham]. Queen Eddid held it. It was then assessed at 1 hide; now it does not pay geld.

<sup>1</sup> Now in Odiham Hundred.

<sup>2</sup> Now Alton and Selbourne Hundreds.

<sup>3</sup> Near Alton. The *Nomina Villarum* of 1316 (9 Ed. II.) implies that this royal manor extended over Binsted, Wheatley, and Kingsley to the east and Alton (with Thedden Grange and Winhall Farm) to the south-west, being thus some five miles wide.

\* Adjoining Neatham.



## THE HOLDERS OF LANDS

There is land for 3 ploughs. There 7 villeins have 3 ploughs. There is wood(land) worth 30 swine.

T.R.E., and afterwards, as now, (it was) worth 60 shillings.

The King himself holds CILTELEI [Chiltley in Bramshott]. Lanch held it of king Edward as an alod (*in alodium*). It was then assessed at 2 hides; now at half a hide. There is land for 2 ploughs. There 4 villeins have 2 ploughs. There is wood(land) worth 30 swine. It is worth, and was worth, 53 shillings.

The King himself holds SELESBURNE [Selborne]. Queen Eddid held it, and it never paid geld. Of this manor the King gave half a hide with the church to Radfred the priest. T.R.E., and afterwards, it was worth 12 shillings and 6 pence; now 8 shillings and 4 pence.

### IN CEPTUNE HUNDRET <sup>1</sup>

The King himself holds MALPEDRESHAM <sup>2</sup> [Mapledurham] in demesne. Ulveve held it, and queen Mathild had it. It was assessed, T.R.E., at 20 hides, now at 13. There is land for 20 ploughs. In (the) demesne are 4 ploughs, and (there are) 34 villeins and 15 bordars with 15 ploughs. There is a church, and 8 serfs, and 3 mills worth 20 shillings, and 5 acres of meadow. There is wood(land) worth 30 swine from the pannage. From the pasturage (*de herbagio*) (come) 6 shillings and 3 pence.

Of this land Albold' the cook holds 2½ hides; Tedgar held them, T.R.E., and could not betake himself (*ire*) elsewhere. This land paid geld above <sup>3</sup> from half a hide with the other hides. There is in (the) demesne 1 plough, and (there are) 5 villeins and 3 bordars, with 1 plough, and 2 serfs and 1 acre of meadow.

Of this land, of the said manor, also, Tetbald' holds 3½ hides. Richard de Tonebrige <sup>4</sup> gave it him when he had the land from the Queen. Now they know not through whom he holds it. Two 'rachenistre' held it and could not betake themselves (*recedere*) elsewhere. There are 2 ploughs in (the) demesne, and (there are) 4 villeins and 8

bordars, with 1 plough, and 2 serfs and 1 acre of meadow. There is wood(land) worth 6 pence.

The whole manor was worth 25 pounds T.R.E., and the same afterwards, and now; and yet he who holds it pays 32 pounds. Albold's part is worth 40 shillings; Tetbald's part 4 pounds.

### IN PORTESDON HUNDRET <sup>5</sup>

The King himself holds WIMERINGES [Wymering] in demesne. King Edward held it. It was never assessed in hides (*hidatum*). In the demesne are 2 ploughs, and (there are) 16 villeins and 6 bordars with 4 ploughs. There are 2 serfs. (There is) wood(land) worth 5 swine.

In COSEHAM [Cosham] <sup>6</sup> are 4 hides which belong to this manor, where were, T.R.E., 8 burs (*sic*), 1 coliberts <sup>7</sup> (*sic*), with 4 ploughs, paying 50 shillings less 8 pence. There is in (the) demesne 1 plough, and there are 8 villeins and 8 bordars, with 5 ploughs, and 2 serfs, and 1 saltpan.

In PORTCESTRE [Porchester] is another part of this manor. It was never assessed in hides (*hidata*). There is in (the) demesne 1 plough, and (there are) 1 villein, and 6 bordars, with 1 plough. There is 1 acre of meadow. (There is) wood(land) worth 10 swine.

### IN BOSEBERG <sup>8</sup> HUNDRET

The King himself holds in HALINGEI [Haying Island] 2½ hides. Leman held (them) of king Edward in parage (*in paragio*). Harold took (them) from him when he seized (*invasit*) the kingdom and included (them) in (the sources of the Crown) ferm (*misit in firma sua*); and this is so still. It was then assessed at 2½ hides; now at nothing. There is land for 1½ ploughs. In (the) demesne is 1 plough, and (there are) 1 villein and 8 bordars, with half a plough, and 1½ acres of meadow.

T.R.E. it was worth 40 shillings, and afterwards 20 shillings; now 70 shillings.

### IN MENESTOCH <sup>9</sup> HUNDRET

The King himself holds SUDBERTUNE [Soberton]. Leman held it of earl Godwine. Harold, when he was reigning, took it from him and included (it) in (the sources of the Crown) ferm; and this is so still.

<sup>1</sup> Now Finchdean Hundred.

<sup>2</sup> In Buriton and Petersfield.

<sup>3</sup> *i.e.* in the above manor.

<sup>4</sup> Richard son of count Gilbert of Brionne. Also known as Richard de Clare and Richard de Bienfaite.

<sup>5</sup> Now Portsdown Hundred.

<sup>6</sup> In Wymering and Widley.

<sup>7</sup> This means "8 burs or coliberts."

<sup>8</sup> Now Bosmere Hundred.

<sup>9</sup> Now Meonstoke Hundred.

## A HISTORY OF HAMPSHIRE

Leman could not betake himself (*recedere*) whither he would. (The jurors) say that (this manor) was held in parage in (the lordship of) Ceptune.<sup>1</sup> It was then assessed at 4 hides; now at nothing. There is land for 2 ploughs. In (the) demesne is half a plough, and (there are) 6 villeins and 3 bordars, with 2 ploughs, and 2 mills worth 15 shillings, and 1 acre of meadow. (The whole) is, and always was, worth 3 pounds.

The King himself holds SUDBERTUNE [Soberton]. Godwine held it of king Edward in parage, and could not betake himself (*recedere*) elsewhere. Harold took it from him and included it in the (sources of the Crown) ferm; and this is so still. It was then assessed at 3 hides; now at nothing. There is land for 2 ploughs. In (the) demesne is half a plough, and (there are) 3 villeins and 2 bordars, with 1 plough. There is 1 mill worth 5 shillings, and 3 acres of meadow. (The whole) is, and always was, worth 40 shillings. These two estates (in Soberton) pay (*reddunt*) 40 shillings more.<sup>2</sup>

(The King) himself holds MENESTOCHE [Meon Stoke]. It was part of (the sources of) king Edward's ferm. It was then assessed at 1½ hides; now at nothing. There is land for 4 ploughs. In (the) demesne are 1½ ploughs, and (there are) 3 villeins and 16 bordars with 1½ ploughs. There are 4 serfs, and 4 coliberts, and 1 mill worth 10 shillings, and 3 acres of meadow. There is wood(land) worth 10 swine; and from the pasturage (*herbagio*) come 10 shillings.

### IN MENE<sup>3</sup> HUNDRET

The King himself holds MENES [Meon (East)]. Archbishop Stigand held it T.R.E., to the use of (*ad opus*) the monks, and had it afterwards as long as he lived. (There) were then 72 hides, and it paid geld on (*pro*) 35 hides and 1 virgate. There is land for 64 ploughs. In (the) demesne are 8 ploughs, and (there are) 70 villeins and 32 bordars, with 56 ploughs. There are 15 serfs and 6 mills worth 40 shillings, and 8 acres of meadow. There is wood(land) worth 200 swine from the pannage. From the pasturage (*herbagio*) (come) 7 shillings and 6 pence. It was worth, T.R.E., 60 pounds, and afterwards 40 pounds. It is now worth 60 pounds; but it pays a rent of 100 pounds

by weight; but it cannot bear (so high a rent).

Of the land of this manor, bishop Wachelin (of Winchester) holds 6 hides and 1 (virgate) with the church. These hides, held by the bishop, paid geld, but now only 3 hides and 1 virgate (pay); the others have not paid.

fo. 38b.

### IN BERTUNE<sup>4</sup> HUNDRET

The King himself holds BERTUNE [Barton Stacey]. It was part of (the sources of) king Edward's ferm; and it provided half a day's ferm (*dimidiam diem firmæ reddidit*) in all things. To this manor appertains (*adjacet*) ORDIE [King's Worthy] which is a berewick. It was never assessed in hides (*in bidas numeratum*), 6 hides excepted, which were, and are now, held by coliberts. (The jurors) have not stated the number of hides. There is land for 25 ploughs. In (the) demesne are 5 ploughs; and (there are) 28 villeins, and 47 bordars with 18 ploughs. There are 8 serfs and 3 mills worth 42 shillings and 6 pence. There are 6 coliberts and 37 acres of meadow; there is wood(land) worth 80 swine from the pannage. From the pasturage (*de herbagio*) (come) 46 shillings.

T.R.E. it was worth 38 pounds 8 shillings and 4 pence; and the same afterwards. It is now worth 33 pounds; but it pays 52 pounds 6 shillings and 1 penny.

### IN ODIHAM<sup>5</sup> HUNDRET

The King himself holds ESSEHAM [Lasham]. Hacon held it of king Edward as an alod (*in alodium*). It was then assessed at 5 hides. Now at 2½ hides. There is land for 6 ploughs. In (the) demesne is one plough, and (there are) 8 villeins and 7 bordars with 4 ploughs. There are 5 serfs; and 1 acre of meadow. T.R.E., as now, it was worth 100 shillings; when received (it was worth) 60 shillings.

### IN BROCTON<sup>6</sup> HUNDRET

The King himself holds WALLOPE [Over Wallop]. Countess Gueda<sup>7</sup> held it of earl Godwin. It then paid geld for 22 hides; now for nothing. There is land for 15 ploughs. In (the) demesne are 6 ploughs, and (there are) 30 villeins and 39 bordars with 12 ploughs. There are 18 serfs, and 3

<sup>1</sup> See below, p. 478.

<sup>2</sup> *i.e.* more than their value.

<sup>3</sup> Now East Meon Hundred.

<sup>4</sup> Now Barton Stacey Hundred.

<sup>5</sup> Now part of Odiham Hundred.

<sup>6</sup> Now Thorngate Hundred.

<sup>7</sup> Gytha wife of earl Godwine.



## THE HOLDERS OF LANDS

mills worth 15 shillings, and 9 acres of meadow, (and) a saltpan worth 5 pence. (There is) wood(land) worth 40 swine; and 2 haws<sup>1</sup> (*hagæ*) in Wincestre [Winchester] worth 65 pence.

There is a church to which belong 1 hide and a moiety of the tithes of the manor, and the whole *cirset*, and 46 pence from the villeins' tithes, and one half of the lands (*agrorum*).

There is, besides, a chapel (*æcclesiola*) to which belong 8 acres of tithe.

To this manor belonged T.R.E. the third penny of six hundreds; it had also free right of pasture and pannage, in all the woods belonging to those 6 hundreds. T.R.E. it was worth 30 pounds; and afterwards 27 pounds. Now 27 pounds. And yet it is farmed (*reddit de firma*) for 31 pounds and 5 shillings.

What belongs to the churches is worth 25 shillings.

The King himself holds another WALLOPE [Nether Wallop]. Earl Harold held it. It then paid geld for 17 hides; now for nothing. There is land for 10 ploughs. In (the) demesne are 2 ploughs, and (there are) 22 villeins and 16 bordars, with 9 ploughs. There are 3 serfs, and 3 mills worth 25 shillings, and 4 acres of meadow. (There is) wood(land) worth 3 swine.

T.R.E., and afterwards, it was worth 20 pounds; now 23 pounds; but it pays 27 pounds 10 shillings of 20 (pence) to the ounce.

The King himself holds BRESTONE [Broughton]. King Edward held it in demesne. (The jurors) have not given an account (*rationem*) of the hides. There is land . . . In (the) demesne are 2 ploughs, and (there are) 8 villeins, and 11 bordars with 4½ ploughs. There are 4 coliberts, and 3 mills worth 27 shillings and 6 pence, and 50 acres of meadow. (There is) wood(land) worth 3 swine.

What belongs to this manor was worth T.R.E., and afterwards, 76 pounds 16 shillings and 8 pence. (It is) now worth 66 pounds; yet it is farmed (*reddit de firma*) for 104 pounds 12 shillings and 2 pence.

There belongs to this manor a wood which is in the hands of bishop Walchelin, but as yet (the right to it) has not been proved (*diratiocinata*). A certain (portion of) land was given T.R.E. in exchange for a mill

belonging to this manor; but the reeve, T.R.W., received the mill, and retains both it and the land.

In the same hundred is DENE [Dean], which appertains to this manor. There is in (the) demesne 1 plough; and (there are) 2 villeins and 14 bordars with 1½ ploughs. There are 2 serfs, and 2 mills worth 20 shillings; and 4 acres of meadow. (There is) wood(land) worth 3 swine.

Belonging to (*de*) this manor, the King has in Wallope [Wallop] 5 villeins, 1 serf, and a mill worth 30 pence, and 2 ploughs in (the) demesne; and (the) coliberts or boors (*bores*),<sup>2</sup> as above, render the accustomed duties (*consuetudinem*).

Formerly the reeve had the honey and pasture belonging to the above manors towards (paying) his 'farm,' and also timber for house-building. But now the foresters enjoy this, and the reeves nothing (of it). The honey and pasture in the King's forest are worth 10 shillings each.

### IN ESSEBORNE<sup>3</sup> HUNDRET

The King himself holds OPTUNE [Upton<sup>4</sup>] (which was part) of Queen Eddid's land. It was then assessed at 1 hide; now at nothing. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 3 bordars with 2 ploughs. There is 1 serf. (There is) wood(land) sufficient for the fences (*ad clausuram*). It was worth, T.R.E., 4 pounds; and afterwards 40 shillings. Now 60 shillings; but it is farmed for 4 pounds.

### IN ANDOVER HUNDRET

The King holds CLADFORD [Clatford] in demesne (which was) of the fief of earl Roger (of Hereford). Saxi held it of king Edward. It then paid geld for 11 hides; now for 4½ hides. (There is) land for 10 ploughs. In (the) demesne are 3 ploughs, and (there are) 16 villeins and 21 bordars with 7 ploughs. There are 8 serfs and 3 mills worth 57 shillings and 6 pence; and 15 acres of meadow. (There is) wood(land) worth 10 swine; and 7 haws (*hagæ*) in Wincestre [Winchester] worth 10 shillings. It was worth 20 pounds T.R.E., and afterwards, and now 15 pounds 10 shillings; and yet it is farmed [*reddit de firma*] for 20 pounds.

<sup>2</sup> "or boors" interlined.

<sup>3</sup> Now Pastrow Hundred.

<sup>4</sup> In Hurstbourn Tarrant and Vernham Dean.

<sup>1</sup> Enclosed spaces in a town.

# A HISTORY OF HAMPSHIRE

Of this manor, the abbey of Lyre holds 3 virgates of land, and the tithe of the vill; and Adelina the jester (*joculatrix*) holds 1 virgate, which was given her by earl Roger (of Hereford).

## IN RODBRIGE<sup>1</sup> HUNDRET

The King himself holds STANEUDE [Stanswood in Fawley]. Cheping held it of king Edward. It was then assessed at 2 hides. It is now assessed at 1 only, because the other is in the forest. (There is) land for 7 ploughs. In (the) demesne is 1 plough, and (there are) 13 villeins and 20 bordars with 7 ploughs. There are 4 serfs, and a mill worth 5 shillings, and 4 acres of meadow; and 2 fisheries worth 50 pence. (There is) wood(land) worth 10 swine. It was worth T.R.E. 10 pounds, and was afterwards, and is now, worth 7 pounds. This manor is included in the (sources of) the King's ferm (*jacet in firma regis*) which he has from the Isle of Wight.

The King himself holds EDLINGES [Eling] in demesne. This manor, T.R.E., rendered half a day's ferm (*dimidiam diem firmæ*). (The jurors) do not know the number of hides (there). (There is) land for 20 ploughs. In (the) demesne are 5 ploughs, and (there are) 13 villeins and 43 bordars with 7 ploughs. There are 13 serfs, and 2 mills worth 25 shillings. For the pasturage (*herbagio*) (is paid) 45 shillings. There are a fishery, and a saltpan without profit (*censu*), and 125 acres of meadow. (There is) wood(land) worth 20 swine, which still belongs to the manor (*in firma remansit*). (The) other wood(land) is in the hands of the King. There is a church to which belongs half a carucate of land in almoine. There also belong to this manor two berewics in (the Isle of) Wi(gh)t, and 3 others out of it. When Hugh de Port received it, those 2 in the island were wanting, and were held by earl William [of Hereford]. Into the forest were taken (*occupatæ*) 16 dwellings (*mansuræ*) for villeins and three for bordars, also wood(land) worth 280 swine from the pannage, and a yearly produce of 3 *sestiers* of honey; all which is now taken from the manor, and is appraised at 26 pounds in all. (The manor) was worth T.R.E. 38 pounds 8 shillings and 4 pence; and afterwards the same sum. It is now worth 20 pounds, but it pays 52 pounds 6 shillings and 1 penny, including those things which fall (with)in the forest.

<sup>1</sup> Now Redbridge Hundred.

## IN EGHEIETE<sup>2</sup> HUNDRET

The King holds THUINAM [Twynham<sup>3</sup>] in demesne. It belonged to king Edward's ferm, and was then, and now, (assessed at) 1 virgate of land. There is land for 13 ploughs. In (the) demesne are 2 ploughs, and (there are) 21 villeins and 5 bordars with 12 ploughs. There are 1 serf and 3 coliberts and 4 "Radchenistri," with 2½ ploughs; and a mill worth 5 shillings, and 61 acres of meadow. The wood(land) is (now) in the King's forest; there were there (formerly) 5 villeins with 3 ploughs.

In the borough of Thuinam [Twineham] are 31 messuages (*mansuræ*), paying 16 pence (land) gavel each.

fo. 39.

T.R.E., and afterwards, it was worth 19 pounds, by tale. It is now worth 10 pounds, of 20 (pence) to the ounce; but it pays 12 pounds, and 10 shillings. That part which is in the forest is valued at 12 pounds and 10 shillings.

The King himself holds HOLEEST [Holdenhurst]. Earl Tosti(g) held it. It was then assessed at 29 hides and half a virgate. When Hugh de Port received it, there were 22 hides and half a virgate, and they never paid geld. The other 7 hides are in the Isle (of Wight). There are now 18½ hides and half a virgate. 3½ hides are in the New Forest. There is land for 20 ploughs. In (the) demesne are 4½ ploughs, and there are 37 villeins and 25 bordars with 19 ploughs. There is a chapel (*ecclesiola*), and 14 serfs; and a mill worth 15 shillings; and 3 fisheries for the use of (*servientes*) the hall; and 181 acres of meadow. (There is) wood(land) worth 6 swine from the pannage. On 7 (*sic*)<sup>4</sup> hides, which are now in the forest dwelled 13 villeins and 3 bordars with 8 ploughs; and with these hides, now detached from (*foris*) the manor, there is wood(land) worth 129 swine from the pannage. T.R.E. it was worth 44 pounds and afterwards 34 pounds. It is now worth 24 pounds by tale; but it pays 25 pounds of 20 (pence) to the ounce. That part, which is now in the forest, is appraised at 12 pounds 10 shillings.

## IN RINCVEDE<sup>5</sup> HUNDRET

The King holds RINCVEDE [Ringwood] in demesne. Earl Tosti(g) held it. It was

<sup>2</sup> Now part of Christchurch hundred.

<sup>3</sup> Now Christchurch.

<sup>4</sup> ? An error for '3½.'

<sup>5</sup> Ringwood.



## THE HOLDERS OF LANDS

then assessed at 28 hides; now at nothing. When the sheriff received it, there were but 10 hides; the rest were in (the Isle of) Wi(gh)t. There are now (only) 6 hides, the remainder being in the forest. There is land for 16 ploughs. In (the) demesne are 4 ploughs, and (there are) 56 villeins and 21 bordars with 13 ploughs, and 1 'Radchenist' with half a plough. There is a church to which belongs half a hide in almoine. There are 8 serfs, and a mill worth 22 shillings, and 105 acres of meadow. T.R.E. it was worth 24 pounds, and afterwards 16 pounds, now 8 pounds and 10 shillings; but it pays 12 pounds and 10 shillings of 20 (pence) to the ounce. On 4 hides, which are now in the forest dwelled 14 villeins and 6 bordars with 7 ploughs; (there were) also a mill worth 30 pence and wood(land) worth 189 swine from the pannage. That part which the King has is worth 7 pounds, 10 shillings by tale.

### IN BOVERE <sup>1</sup> HUNDRET

The King himself holds LINHEST [Lyndhurst] which appertained to (*jacuit in*) Ambresberie [Amesbury], (which is) of the King's ferm. It was then assessed at 2 hides. Of those 2 hides, Herbert the forester holds now 1 virgate, and pays geld for that amount; the remainder is in the forest. There are now only 2 bordars. It is worth 10 shillings. T.R.E. it was worth 6 pounds.

### IN FORDINGEBRIGE <sup>2</sup> HUNDRET

The King himself holds SLACHAM [ ] in his forest. Alestan held it of king Edward as an alod (*in alodium*). It then paid geld for half a hide, now for nothing. There is land for 1 plough. When Ralf de Limesi received it, there were 3 villeins with 1 plough. It was worth 25 shillings.

The King himself holds JVARE [Eyeworth]<sup>3</sup> in the forest. Two freemen held it of king Edward as an alod (*in alodium*). It then paid geld for 1 virgate, now for nothing. It was worth 10 shillings.

<sup>1</sup> The New Forest Hundred.

<sup>2</sup> Fordingbridge.

<sup>3</sup> Not identified by Mr. Moody. Mr. Wise (*The New Forest*, p. 114) identifies it as Eyeworth (Lodge), near Fritham, "the *Ivare* of Domesday, and still so called by the peasantry, afterwards *Yvez*." In *Collections for the History of Hampshire* [1795], the name appears as 'Ivory Lodge' [l. 270].

The King holds BEDECOTE [Bedcot in Fordingbridge] in the forest. Doda held it of king Edward as an alod (*in alodium*), and it then paid geld for half a hide. (There is) land for 1 plough, which is now in the forest except 11½ acres of meadow, which Picot holds. It was worth 20 shillings, and afterwards 15 shillings.

In the same Hundred the King holds 1 virgate of land which Edric held of king Edward as an alod (*in alodium*), and it paid geld for 1 virgate; now for nothing. There is land for 1 plough. It is all in the forest except 1½ acres of meadow which the son of Alric holds. It was worth 7 shillings and 6 pence.

The King holds ROCHEBORNE [Rockbourn] in demesne. King Edward held it. It never paid geld or was assessed in hides (*hidata*). In (the) demesne are 2 ploughs; and (there are) 4 villeins and 20 bordars with 3 ploughs. There are 3 acres of meadow.

The King holds BRUMORE [Breamore], which belongs to the above manor, and king Edward held it.<sup>4</sup> In (the) demesne is 1 plough; and (there are) 4 villeins, and 8 bordars with 4 ploughs and 82 acres of meadow. Of this manor 2½ hides and wood(land) worth 50 swine are in the forest. This used to pay 51 shillings and 8 pence.

One hide in the Isle of Wight belongs to this manor. Gherui holds it. From it there used to come 9 pounds towards the King's ferm, and the priest had 20 shillings.

Half a hide of this manor, held by Ulmar, is in the King's forest.

Between Brumore [Breamore], Rocheborne, [Rockbourn], Brestone [Broughton], and Borgeate [Burgate] there falls (with) in the forest 13 pounds 10 shillings. And from (that part which is in) the Isle (of Wight) 9 pounds (is received) of ferm; and from (*sic*) the priest 20 shillings.<sup>5</sup>

The King holds BORGATE [Burgate]. (There is) 1 virgate of land. King Edward held it. In (the) demesne is 1 plough; and (there are) 7 villeins and 18 bordars and 8 coliberts with 7 ploughs. There is a mill

<sup>4</sup> A blank left here for the ploughlands.

<sup>5</sup> The entries on these manors are somewhat confused. The reference to Broughton and the Forest seems to allude to the loss of honey and of pasture entered above after 'Dene,' while Breamore and Burgate seem to have been held jointly with Rockbourn.

## A HISTORY OF HAMPSHIRE

worth 10 shillings and 1,000 eels, and (there are) 80 acres of meadow. The wood(land) of this manor is in the King's forest, with the pasture, which used to furnish 40 swine and 10 shillings (respectively).

### IN ANDOVERE HUNDRET

The King holds ANNE [? Monxton] in demesne. Ulveve held it of king Edward as an alod (*in alodium*). It was then assessed at 10 hides; now at 2½ hides. (There is) land for 3 ploughs. In (the) demesne are 2 ploughs, and (there are) 3 villeins and 5 bordars with 2 ploughs. There are 3 serfs; and a mill worth 7 shillings and 6 pence; and 2 acres of meadow, and a small wood. T.R.E. it was worth 100 shillings; and afterwards and now 9 pounds.

The King himself holds FERLEI [Quarley]. Earl Harold held it. It was then assessed at 5 hides; now at nothing. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 11 bordars with 3 ploughs. There are a church and 12 serfs. (There is) wood(land) without pannage. T.R.E. it was worth 12 pounds; and afterwards and now 8 pounds.

The King holds ANDOVERE [Andover] in demesne. King Edward held it. (The jurors) have not stated the number of hides. (There is) land<sup>1</sup> . . . In (the) demesne are 2 ploughs and (there are) 62 villeins, and 36 bordars, and 3 coliberts, and 6 serfs, with 24 ploughs. There are 6 mills worth 72 shillings and 6 pence; and 18 acres of meadow. (There is) wood(land) worth 100 swine from the pannage.

### IN BASINGESTOCH HUNDRET

The King holds BASINGESTOCHES [Basingstoke] in demesne. It was always a royal manor. It never gave geld; nor was it ever assessed in hides (*nec hida ibi distributa fuit*). (There is) land for 20 ploughs. In (the) demesne are 3 ploughs; and (there are) 20 villeins and 8 bordars with 12 ploughs. There are 6 serfs and 3 mills worth 30 shillings; and 12 coliberts with 4 ploughs. There is a market worth 30 shillings, and 20 acres of meadow; and in Winestre [Winchester] 4 inhabitants of the suburbs (*suburbani*) used to pay 12 shillings and 11 pence. The land belonging to one of these is now held by Geoffrey the chamberlain; but

neither the sheriff nor the Hundred (court) have ever seen the King's seal for it (*inde*). There is wood(land) worth 20 swine.

The King holds CLERE [Kingsclere] in demesne. It was (part of the sources) of king Edward's ferm and contributes to (*pertinet ad*) the day's ferm (rendered) from Basingstoches. (The jurors) did not know the number of hides. (There) is land for 16 ploughs. In (the) demesne are 3 ploughs, and (there are) 21 villeins and 31 bordars with 13 ploughs. There are 2 mills worth 100 pence; and 7 serfs.

From the toll (is received) 15 shillings, and from the wood(land) 20 shillings. There are also 6 acres of meadow, and wood(land) worth 15 swine. Two coliberts pay 13 shillings.

The King holds ESSEBORNE [Hurstbourn Tarrant] in demesne. It was (part of the sources) of king Edward's ferm. (The jurors) have not the number of hides. There is land for 16 ploughs. In (the) demesne are 2 ploughs; and (there are) 24 villeins and 12 bordars with 15 ploughs. There are 10 acres of meadow. (There is) wood(land) worth 20 swine, and for the pasturage (*herbagio*) (are paid) 20 shillings.

Vitalis, the priest, holds the church belonging to this manor, together with half a hide. And there he has 1 plough with 2 bordars and 1 acre of meadow and the *circisset*, which is appraised at 14 shillings.

These 3 manors of Basingstoc(hes) [Basingstoke], Clere [Kingsclere], and Essebourne [Hurstbourn] render one day's ferm.

### IN TICEFELLE HUNDRET

The King holds TICEFELLE [Titchfield]. It is a berewick, and belongs to MENESTOCHES [Meonstoke]. King Edward held it. There are 2 hides; but they have not paid geld. (There) is land for 15 ploughs. In (the) demesne (there are) but 2 oxen (*animalia*), and (there are) 16 villeins and 13 bordars with 9 ploughs. There are 4 serfs, and a mill worth 20 shillings. The market and toll (are worth) 40 shillings.

fo. 39b.

The King holds FACUMBE [Facombe by Netherton].<sup>1</sup> Lang held it of king Edward.

<sup>1</sup> Mr. Moody identifies this as 'Pacombe in Titchfield' (which I do not find on the map). I make it to be Facombe in Pastrow Hundred, afterwards held by the Punchardons. As the entry is marginal, the name of the Hundred, clearly, had to be omitted.

<sup>1</sup> A blank left here.



## THE HOLDERS OF LANDS

It was then assessed at 13 hides, now at 7. There is land for 12 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 serfs and 21 villeins and 12 bordars with 10 ploughs. There is a mill worth 20 shillings. There are 14 acres of meadow and pasture (worth) 51 pence. In Winchester [Winton] are 6 houses (belonging to this manor); there is 1 acre of meadow, and wood(land) worth 4 swine. It was, and is, worth 13 pounds, and yet it is farmed for 16 pounds.

Roger of Poitou<sup>1</sup> has it now.<sup>2</sup>

### IN SUMBURNE<sup>3</sup> HUNDRET

The King holds SUMBURNE [King's Sombourn] in demesne. It was a royal manor, but (*sic*) was not assessed in hides (*per bidas distributum*). There is land for 10 ploughs. In (the) demesne are 3 ploughs; and (there are) 25 villeins and 8 bordars with 8 ploughs. There are 2 serfs; and 3 mills worth 15 shillings. There are 7 coliberts and 20 acres of meadow; and pasture worth 17 shillings; and 10 pence (come) from the pasturage (*de herbagio*). The soc of 2 Hundreds belongs to this manor. There are 2 churches, to which half a hide belongs in almoine. The bailiff (*præfectus*) claims 1 virgate of land for the use of this manor, and some pasture (*pascua*) which they call Down (Dunam) which pays 15 shillings. The count of Mortain holds it; but the (jurors of the) Hundred assert that it ought to be included in (the sources of) the King's demesne firm (*in dominica firma regis jacere*), and was so T.R.E., with the meadow in the same (manor).

### THE UNDER-MENTIONED LANDS LIE IN THE ISLE OF WI(GH)T

The King holds CHENISTONE [Knighton], and DONE [the Down]<sup>4</sup> in demesne. Eight freemen held them of king Edward as an alod (*in alodium*). They then paid geld for 2 hides; now for nothing. Oda, with 2 freemen, had half a hide, and the fourth part of a virgate. Alwold 1 virgate, Herould 1 virgate, Godwin 1 virgate, Alric 1 virgate, and Brictric half a hide; and each of these had part of a mill, worth, each part, 22 pence. The land of

these 5 (*sic*) thegns is held by the King (included) in his ferm; and there he has 2 ploughs in demesne. It is appraised at 100 shillings, and yet it is farmed (*reddit de firma*) for 8 pounds. That part held by Oda (is worth) 11 shillings; that held by Alwold 5 shillings; and Herold's part also 5 shillings.

The King holds LADONE [the Down] and BEDINGEBORNE [Bangbourn] in demesne. Oda held them of king Edward as an alod (*in alodium*). They then paid geld for 4 hides, and now for half a hide. There is land for 3 ploughs. The King holds it (included) in his ferm. Oda had 4 pounds of ferm (*de firma*).

The King holds SANDFORD [Sandford] with WICA [Week] in demesne. King Edward held them. (There were) then 3 hides. When the sheriff received them, there were 2 hides and 1 virgate. There is land for 12 ploughs. In (the) demesne are 3 ploughs, and (there are) 10 villeins and 3 bordars with 6 ploughs. There are 10 serfs, and 2 mills worth 70 pence; and 6 acres of meadow. From the pasturage (*de herbagio*) (come) 20 shillings. There is wood(land) without pannage. The above manors were worth, T.R.E., 25 pounds of weighed and assayed money (*ad pensum et arsuram*). When the King received them, they were worth 20 of the above pounds, and now they are worth 20 pounds of weighed money, and yet they are farmed [*reddit de firma*] for 26 pounds of weighed money and 100 pence.

The King holds ADRINTONE [Arreton] in demesne. King Edward held it. There are 4 hides. There is land for 5 ploughs. In (the) demesne are 3 ploughs; and (there are) 10 villeins and 12 bordars with 10 ploughs. There are 7 serfs, and 1 mill worth 15 shillings. The abbey of Lyre holds the church belonging to this manor, together with 1 virgate of land and 1 acre of meadow, and the tithe of the whole manor; and it (all) is appraised at 20 shillings. The whole manor was worth T.R.E. 10 pounds; afterwards it was, and is now, worth 8 pounds; but it pays 12 pounds 'blanch' of 20 (pence) to the ounce.

The King holds EVERELANT [Yaverland] in demesne. King Edward held it. It was not assessed in hides (*hidata*). There is land for 5 ploughs. There are 12 villeins with 5 ploughs. It was worth, T.R.E., 100 shillings; afterwards it was, and is now, worth 4 pounds, but it pays 100 shillings.

<sup>1</sup> Younger son of earl Roger de Montgomery.

<sup>2</sup> The whole of this entry is a marginal addition (see Introduction).

<sup>3</sup> King's Sombourn.

<sup>4</sup> Mersley Down and Ashey Down rise immediately to the north of Knighton (in Newchurch).

## A HISTORY OF HAMPSHIRE

The King holds ABEDESTONE [Adgestone]<sup>1</sup> in demesne. Three freemen held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 hide. There is land for 3 ploughs. There are 11 villeins with 4 ploughs. It was, and is, worth 40 shillings; but it pays 60 shillings 'blanch' (*albas*). The King has a piece of land in the island, which renders [*unde exeunt*] 6 ploughshares.

The King holds SCALDEFORD [Scottlesbrook] in demesne. Sauord held it of king Edward as an alod (*in alodium*). It paid geld then as now for half a hide. There is land for 1 plough. There are 3 villeins with 1½ ploughs. It was, and is, worth 13 shillings, but it pays 16 shillings and 8 pence.

The King holds LISCELANDE [Lisland] in demesne. Five freemen held it, allodially (*in alodium*), as 5 manors, of king Edward. It paid geld then for 1 hide and half a virgate; now for half a hide, and half a virgate. Almar had half a hide; Ulnod, half a virgate; Odeman, half a virgate; and Godman, 1 virgate. There is land for 2 ploughs. 4 villeins have 2½ ploughs in demesne, and 5 acres of meadow. It was, and is, worth 20 shillings.

The King holds LOVECOMBE [Luccomb]. Sawin held it of king Edward as an alod (*in alodium*). It then paid geld for 1 hide; but now for 2 thirds of a virgate. There is land for 1 plough, which is in demesne, with 6 bordars and 2 serfs. It was worth, T.R.E., 4 pounds; now 3 pounds; and yet it is farmed (*reddit de firma*) for 4 pounds.

The King holds NONOELLE [Nunwell]. Ulfet held it of earl Tosti(g); but it was not an alod. It then paid geld for 2 hides, but now for 1 virgate. There is land for 1½ ploughs. In (the) demesne is (1) plough, and (there are) 1 villein and 2 bordars with half a plough, and 3 serfs. It was worth T.R.E. 60 shillings; it was afterwards, and is now, worth 40 shillings; but it pays a blanch ferm (*de firma alba*).

The King holds LACHERNE [Kerne]. Earl Harold held it. It was then assessed at 1 hide; but now at nothing. There is land for 1 plough, which is in (the) demesne, with 2 bordars and 5 serfs. It was worth T.R.E. 25 shillings; it was afterwards, and is now, worth 20 shillings.

The King holds ULWARTONE [Wolverton]. Eddeva held it of earl Godwin(e). It then paid geld for half a hide, but now for nothing. There is land for 1 plough, which is in (the) demesne, with 3 bordars and 1 serf. It was, and is, worth 10 shillings.

The King holds SANDE [Sandown]. Ulnod held it of the King as an alod (*in alodium*). It then paid geld for 2 hides; but now for half [a hide], and half a virgate. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 7 villeins and 1 bordar with 3 ploughs, and 4 acres of meadow. It was worth 40 shillings; now 30 shillings.

The King holds WAROCHESELLE [Wroxall]. The countess Gueda<sup>2</sup> held it of earl Godwin, as an alod (*in alodium*). It then paid geld for 5 hides; but now it is assessed at 2½ hides. There is land for 10 ploughs. In (the) demesne are 4 ploughs; and (there are) 10 villeins and 24 bordars with 7 ploughs. There are 17 serfs, and 2 mills worth 20 shillings, and 3 acres of meadow. There is wood(land) worth 1 pig. It was worth, T.R.E., 27 pounds; it was afterwards, and is now, worth 20 pounds; but it pays 22 pounds.

The King holds HASELIE [Haseley]. Earl Harold held it. It then paid geld for 3 hides; now for 1½ virgates. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 villeins and 4 bordars with 2 ploughs. There are 15 serfs, and 10 acres of meadow. There is wood(land) worth 2 swine. It was worth, T.R.E., 8 pounds; it was afterwards, and is now, worth 100 shillings; but it pays 8 pounds, of 20 (pence) to the ounce.

The King holds BENVERDESLEI [Barnsley]. Godwin held it of king Edward as an alod (*in alodium*). It then paid geld for 1 hide; but now for half a hide, and half a virgate. There is land for 2 ploughs. There are 3 villeins with 1 plough. There is wood(land) worth 1 pig. It was worth 40 shillings; it is now worth 20 shillings.

The King holds CHOCHEPON [ ] and ETHARIN [ ]. Two freemen held it of king Edward, as 2 manors, as an alod (*in alodium*). It then paid geld for 1 hide; now for 3 virgates. There is land for 1 plough, which is in (the) demesne, with

<sup>1</sup> In Brading.

<sup>2</sup> Gytha wife of earl Godwine.



## THE HOLDERS OF LANDS

3 villeins. It was worth 30 shillings; now 20 shillings; but it pays 30 shillings.

The King holds HOTELESTON [Nettleston]. Alnod held it, of king Edward, as an alod (*in alodium*). It then paid geld for the third part of a hide; but now for half a virgate. There is land for half a plough, which is in (the) demesne, with 3 bordars. It was worth 10 shillings; now 5 shillings.

The King holds STANEBERIE [Stenbury] and WIPINGHAM [Whippingham]. Cheping held it of king Edward, as 2 manors, as an alod (*in alodium*). It then paid geld for 3 hides; now for 2 hides. There is land for 7 ploughs. In (the) demesne are 2 ploughs; and (there are) 7 villeins and 10 bordars with 6 ploughs. There are 12 serfs, and 5 acres of meadow. It was always, and is, worth 12 pounds.

The King holds WENECHETONE [Winston]. Two freemen held it of king Edward, as 2 manors, as an alod (*in alodium*). It then paid geld for 1 hide; but now for nothing. There is land for 2 ploughs, which are there with 2 villeins. It was, and is, worth 3 pounds. But from these 2 manors<sup>1</sup> comes a 'farm' of 18 pounds, of 20 (pence) to the ounce.

fo. 40.

One virgate, belonging to this manor, is in Soflet [ ], which was held by Bolla, of king Edward, as an alod (*in alodium*). The King has it now (included) in his ferm.

The King holds NEETON [Niton] and ABLA [Marable?].<sup>2</sup> Two freemen held it, as 2 manors, of king Edward, as an alod (*in alodium*). It then paid geld for 3 hides; now for 1 hide and 1 virgate. There is land for 8 ploughs. In (the) demesne are 3 ploughs; and (there are) 7 villeins and 18 bordars with 5 ploughs. There are 9 serfs. It was worth, T.R.E., 17 pounds, and afterwards, as now, 12 pounds; but it pays 17 pounds.

The King holds ODETONE [Wootton]. Queen Eddid held it. It then, as now, paid geld for 1 hide. There are 4 villeins with 3 ploughs. It is worth, and pays, 3 pounds.<sup>3</sup>

<sup>1</sup> The other is the double manor preceding.

<sup>2</sup> I find there is still a place of that name some three-quarters of a mile south of Niton, but it is not marked on the Ordnance Map.

<sup>3</sup> It should be carefully observed that the

## THE LAND OF THE BISHOP OF WINCHESTER

### IN FAELIE HUNDRET<sup>4</sup>

[II.] WALCHELIN bishop of Winchester holds ALRESFORDE [Alresford] in demesne. It belongs, and always did belong, to the bishopric. It was assessed, T.R.E., at 51 hides;<sup>5</sup> now at 42 hides. There is land for 40 ploughs. In (the) demesne are 10 ploughs; and (there are) 48 villeins and 36 bordars with 13 ploughs. There are 31 serfs,<sup>6</sup> and 9 mills worth 9 pounds and 30 pence. There are 8 acres of meadow. There is wood(land) worth 10 swine from the pannage. Fifty pence (are paid) for pasturage (*herbagio*). There are 3 churches worth (*de*) 4 pounds; they used to pay 6 pounds a year; but they could not bear (it).

Of this land of this manor, Robert holds 3½ hides; Walter (holds) 2 hides; Durand holds 4 hides in Sudbertune [Soberton], and 6 hides in Bieforde [ ]; and 1 Englishman holds 1½ hides. These have 6 ploughs in demesne and 17 villeins, 6 bordars, and 19 serfs (*servos*) with 6 ploughs, and a mill worth 20 shillings, and 6 acres of meadow. Ulvic Cepe, Robert's predecessor, could not betake himself (*ire*) where he would; neither could Osbern, Walter's predecessor; nor Edward and Elric, the predecessors of Durand.

The whole manor was worth, T.R.E., 40 pounds, and afterwards 20 pounds. The Bishop's demesne is now worth 40 pounds; Robert's (holding) 4 pounds; Walter's 40 shillings; and Durand's 11 pounds.

The Bishop himself holds CHELMESTUNE [Kilmiston]. Godwin held it of the Bishop, and could not betake himself elsewhere (*ire aliubi*). It was then, and is now, assessed at 5 hides. There is land for 3 ploughs, 1 of which is in (the) demesne; and (there are) 4 villeins and 4 bordars with 1½ ploughs.

above royal manors lie in the *eastern* half of the Island, while those in the western half are surveyed, under the Isle of Wight, on fo. 52 below. From this it may be inferred that the Island was then divided into two halves, each of which sent in its own return. This conclusion favours Mr. Nichols' theory that the phrases used in the returns depended on the Hundred which made them (see Introduction).

<sup>4</sup> Part of Fawley Hundred.

<sup>5</sup> 'Hida' (*sic*).

<sup>6</sup> 'Servus' (*sic*).

## A HISTORY OF HAMPSHIRE

There are 6 serfs, and 7 acres of meadow. It was, T.R.E. and afterwards, and (is) now, worth 100 shillings.

The Bishop himself holds TUIFORDE [Twyford] in demesne. He always held it. It was assessed, T.R.E., at 20 hides; now at 15 hides. There is land for 25 ploughs. In (the) demesne are 4 ploughs; and (there are) 29 villeins and 20 bordars with 21 ploughs. There is a church worth (*de*) 5 shillings; and 4 mills worth 4 pounds; and 10 acres of meadow. There is wood(land) worth 15 swine (from the) pannage. It was worth, T.R.E. and afterwards, 20 pounds; now 32 pounds.

In the said TUIFORDE the Bishop has 1 manor [Owslebury in Twyford]. Elded wife of Oswald held it (*tenuit*)<sup>1</sup> of the Bishop. W(u)lfric held it T.R.E. It always belonged to (*jacuit in*) the bishopric. It was then assessed at 10 hides; now at 5 hides. There is land for 8 ploughs. In (the) demesne are 2, and (there are) 17 villeins and 20 bordars with 7 ploughs. There are 3 serfs, and 2 mills worth 4 pounds 15 shillings. There are 32 acres of meadow. For the pasturage (*herbagio*) are paid 12 shillings and 6 pence. T.R.E., and afterwards, it was worth 12 pounds; now 15 pounds.

The Bishop himself holds ESTUNE [Easton] in demesne. It always belonged to the bishopric. It was assessed, T.R.E., at 6 hides, and is so now. There is land for 11 ploughs. In (the) demesne are 6 ploughs; and (there are) 7 villeins and 42 bordars with 4 ploughs. There are 12 serfs; and 2 chapels (*æcclesiolæ*), and 2 mills worth 30 shillings; and 58 acres of meadow. There is wood(land) worth 15 swine (from the) pannage. 14 pence (are paid) for the pasture. Turstin holds 52 acres of the demesne, which were held by Ælfeth. Of this land of this manor, Geoffrey holds 3 hides. Brictric held them of the Bishop in parage (*in paragio*), but he could not betake himself elsewhere (*ire aliubi*). There are 1½ ploughs, with 7 bordars, and 10 acres of meadow. Of the same land Alwin (holds) 1 hide and 1 virgate. He held it himself T.R.E. There he has 1 plough, with 5 bordars and 6 acres of meadow. The whole (manor) was worth, T.R.E., 24 pounds; and afterwards 12 pounds. What the Bishop holds is now worth 30 pounds; and what is held by

Geoffrey, 3 pounds; and Alwin's share is worth 25 shillings.

The Bishop himself holds STOCHEs [Bishopstoke] in demesne. It always belonged to the bishopric (*in episcopatu fuit*). It was assessed, T.R.E., and (is) now, at 5 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 6 villeins and 5 bordars with 3 ploughs. There are 6 serfs and a mill worth 10 shillings. There are also a church, and 74 acres of meadow; (there is) wood(land) worth 10 swine. It was worth T.R.E., and afterwards, 6 pounds; now 8 pounds.

Eldred holds CHELMESTUNE [Kilmiston] of the Bishop. His wife held it. T.R.E. it was, as now, assessed at 5 hides. (The tenant) could not betake himself (*ire*) where he would. There is land for 3 ploughs. In (the) demesne is 1 plough, and (there are) 6 villeins and 3 bordars, with 1½ ploughs. There are a chapel (*æcclesiola*) and 7 acres of meadow. It was, and is, worth 100 shillings.

### IN BITELESIETE HUNDRET<sup>2</sup>

The Bishop himself holds CRAWELIE [Crawley] in demesne. It always belonged to the bishopric (*fuit in episcopatu*). T.R.E. it was, as now, assessed at 6½ hides. There is land for 14 ploughs. In (the) demesne are 5 ploughs; and (there are) 6 villeins and 25 bordars with 7 ploughs; and 20 serfs, and 26 acres of meadow. (There is) wood(land) worth 25 swine, and a church. Of this land of this manor, Hugh holds 3 hides. Alwin Stilla held them, of the Bishop, in parage (*in paragio*), and could not betake himself anywhere (*ire quolibet*). There is in (the) demesne 1 plough; and (there are) 2 villeins and 5 bordars with 1 plough. There are 9 serfs, and wood(land) worth 6 pence. T.R.E. the whole manor was worth 35 pounds, and afterwards 28 pounds. The Bishop's demesne is now (worth) 35 pounds; what Hugh holds (is worth) 7 pounds.

### IN WALTHAM HUNDRET<sup>3</sup>

The Bishop himself holds WALTHAM [Bishops Waltham] in demesne. It always belonged to the bishopric (*fuit de episcopatu*). T.R.E. it was, as now, assessed at 20 hides; although there be there 30 hides in number. There is land for 26 ploughs. In (the)

<sup>1</sup> ? Tenet.

<sup>2</sup> Now part of Buddlesgate Hundred.

<sup>3</sup> Now part of Bishops Waltham Hundred.



## THE HOLDERS OF LANDS

demesne are 6 ploughs; and (there are) 70 villeins and 15 bordars with 26 ploughs. There are 7 serfs, and 3 mills worth 17 shillings and 6 pence; and  $2\frac{1}{2}$  acres of meadow. There is wood(land) worth 10 swine. There is (also) a park for beasts (of the chase). T.R.E. it was worth 31 pounds, and afterwards 10 pounds 10 shillings. It is now worth 30 pounds.

Of this land of this manor, Robert holds 3 virgates: villeins held them T.R.E. There he has 1 plough and 1 bordar and 1 serf. It is worth 30 shillings. Ralf the priest holds the 2 churches of this manor, with  $2\frac{1}{2}$  hides; and there he has 2 ploughs (in the demesne); and (there are) 2 villeins and 9 bordars and 7 serfs with 1 plough. It is worth 100 shillings. Of the land belonging to these churches, 1 man holds 1 hide of the land occupied by the villeins (*terra villanorum*); and there he has 1 villein and 3 bordars with 9 oxen: it is worth 30 shillings.

### IN OVERTUNE<sup>1</sup> HUNDRET

The Bishop himself holds OVRETUNE [Overton] in demesne. It always belonged to the bishopric (*uit in episcopatu*). T.R.E. it was, as now, assessed at 41 hides. There is land for 32 ploughs. In (the) demesne are 5 ploughs; and (there are) 50 villeins and 27 borders with 27 ploughs. There are 2 churches,<sup>2</sup> and 17 serfs and 4 mills worth 62 shillings and 6 pence; and 4 acres of meadow. There is wood(land) worth 30 swine from the pannage. T.R.E. it was worth 24 pounds, and afterwards the same sum. Now 50 pounds, but it is farmed (*est ad firmam*) for 61 pounds.

Of the land of this manor, Robert the clerk holds 2 hides; and Gilbert his brother 2 hides. In BRADELIE [Bradley],<sup>3</sup> Geoffrey (holds) 5 hides. The predecessors of these (three), Ælnod', Ultain', and Alric', held of the Bishop, and could not betake themselves (*ire*) anywhere. In (the) demesne they have 3 ploughs; and (they have) 5 villeins, 8 bordars, and 7 serfs with 3 ploughs. T.R.E. it was worth 10 pounds, and afterwards 6 pounds. Now it is worth 7 pounds and 10 shillings.

<sup>1</sup> Overton.

<sup>2</sup> Mr. Moody suggests that the second church is that of Tadley, a chapelry of Overton.

<sup>3</sup> The parish of Bradley is still a detached portion of the Hundred of Overton.

fo. 40b.

### IN MENESTOCHES<sup>4</sup> HUNDRET

The Bishop himself holds MENES [West Meon] in demesne. It always belonged to the bishopric (*uit in episcopatu*). T.R.E. it was assessed at 20 hides; now, at 12 hides. There is land for 14 ploughs. In (the) demesne are 3 ploughs; and (there are) 25 villeins and 17 bordars with 11 ploughs. There is 1 church possessed of (*cum*) 1 hide; and 8 serfs; and 2 mills worth 10 shillings. There are 10 acres of meadow. (There is) wood(land) worth 40 swine; and 8 haws (*hagæ*) in Winchester [Winchester] which pay 6 shillings. T.R.E. it was worth 20 pounds; and afterwards 16 pounds. Now (it is worth) 30 pounds. But it is farmed (*reddit de firma*) for 40 pounds; it cannot, however, bear (it) for long. The church pays 50 shillings.

The Bishop himself holds half a hide in the manor of Menestoeche [Meonstoke]. The Bishop always held it in demesne. T.R.E., as now, it was assessed at half a hide. Here he has half a plough, and 1 villein, and 1 mill. It was, and is, worth 25 shillings. The bishop receives 25 shillings from the church of Menestoeche [Meonstoke].

### IN MENE<sup>5</sup> HUNDRET

The Bishop himself holds, in MENE [East Meon], 6 hides and 1 virgate, with the church. There is land for 4 ploughs. In (the) demesne are  $1\frac{1}{2}$  ploughs, and (there are) 11 villeins and 8 bordars with 3 ploughs. There are 2 serfs, and 1 mill worth 30 pence, and 4 acres of meadow. T.R.E., and afterwards, it was worth 4 pounds; now 100 shillings.

The Bishop himself holds STOCHES [Stoke]<sup>6</sup> in demesne. It always belonged to the bishopric (*uit in episcopatu*). T.R.E. it was assessed at 10 hides; now at 7 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins and 8 bordars with 1 plough. There are 6 serfs and 4 acres of meadow.

Of this land of this manor, Geoffrey holds 4 hides of the Bishop. These were held by villeins. Here he has 1 plough, and 2 bordars, and 6 serfs, and 4 acres of meadow. Mauger holds the church of this manor. It is worth 15 shillings. The whole manor was worth, T.R.E., 10 pounds, and afterwards 8 pounds.

<sup>4</sup> Meonstoke.

<sup>5</sup> East Meon.

<sup>6</sup> Stoke Charity in Buddlesgate Hundred.

# A HISTORY OF HAMPSHIRE

What the Bishop holds is now worth 7 pounds; and what is held by Geoffrey is worth 4 pounds.

## IN FERNEHAM<sup>1</sup> HUNDRET

The Bishop himself holds FERNHAM [Fareham] in demesne. It always belonged to the bishopric (*fuit in episcopatu*). T.R.E. it was, as now, assessed at 20 hides; but there are 30 hides in number. But king E[dward] granted it thus assessed (*ita*) on account of the (ravages of the) Wikings (*Wichingarum*) because it is on the sea. There is land for 20 ploughs. In (the) demesne are 2 ploughs; and (there are) 30 villeins and 16 bordars with 14 ploughs. There are 1 church, and 6 serfs, and 2 mills worth 25 shillings, and 25 acres of meadow. There is wood(land) worth 10 swine (from the) pannage. Thirty pence (are paid) for the pasturage (*herbagio*). T.R.E. it was worth 18 pounds, and afterwards 10 pounds; now 16 pounds; but it is farmed (*est ad firmam*) for 20 pounds; it cannot, however, bear (it).

Of this land of this manor, Ralf holds of the Bishop 7½ hides of villeins' land. Geoffrey (holds) 4 hides; and Hercus held them before. William (holds) 1 hide, which was held by Godwin. These hides paid geld with the others. Those who held them of the Bishop could not withdraw (*recedere*). There are now in (the) demesne 4 ploughs; and (there are) 24 villeins and 10 bordars, with 5½ ploughs. There are 4 serfs, and 3 mills worth 16 shillings, and 16 acres of meadow. There is wood(land) worth 3 swine. The whole is worth 7 pounds.

## IN BROTON HUNDRET

Richer holds CHINGESCAMP [Kings-camp]<sup>2</sup> of the Bishop. The abbey of Ely held it of archbishop Stigand. T.R.E., and now, it paid geld for half a hide. There is land for 1 plough. There is 1 villein with half a plough. There is wood(land) worth 3 swine. T.R.E. it was worth 15 shillings, and afterwards and now 5 shillings.

<sup>1</sup> Now the parish of Fareham.

<sup>2</sup> Mr. Moody identified this with Norman Court. If 'Broton' is 'Brocton' (*i.e.* Thorn-gate) Hundred, 'Chingescamp' would be in this district. But the Hon. F. Baring informs me that the family know of no grounds for Mr. Moody's identification. He termed it, clearly in error, "the place where the delegates of the Saxon population of the West, assembled at Old Sarum, attended to render homage to the Norman Conqueror."

## IN TICEFELLE<sup>3</sup> HUNDRET

In MENE [Meon] the Bishop himself holds 1 hide; and it was assessed at so much. There is land for 1 plough, which is there with 2 villeins. There are 2 acres of wood for fences. It was, and is, worth 20 shillings. Toui had half of this hide by (the act of) earl William (of Hereford); and the other part he had of the King for money (*per pecuniam suam*). And, on the same conditions as Toui held (*per hoc quod Toui tenuit*) this land, the Bishop enjoys it by the King's gift.

## IN MANTESBERGE HUNDRET<sup>4</sup>

The Bishop himself holds EDINTUNE [Ovington].<sup>5</sup> Archbishop Stigand held it. It was then assessed at 1½ hides; now at nothing. There is land for half a plough. There are 2 bordars, and half a mill worth 7 shillings, and 7 acres of meadow. T.R.E. it was worth 25 shillings, and afterwards 19 shillings; now 20 shillings.

## IN MANEBERGE HUNDRET<sup>6</sup>

Richer holds 1 manor, (called) CANDEVRE [Chilton Candover] of the Bishop. Godwin and Lewin held it, of the bishopric, as 2 manors, 5 hides each. T.R.E. it was, and is now, assessed at 10 hides. There is land for 6 ploughs. In (the) demesne are 3 ploughs, and (there are) 1 villein and 10 bordars.

The whole manor was worth, T.R.E., 8 pounds, and afterwards 6 pounds; now 7 pounds.

## IN SUMBURNE HUNDRET<sup>7</sup>

The Bishop himself holds HOUSTUN [Houghton] in demesne. It always belonged to the bishopric. There are 24 hides. T.R.E. it was, as now, assessed at 16 hides. There is land for 28 ploughs. In (the) demesne are 4 ploughs; and (there are) 36 villeins and 46 bordars with 23 ploughs. There are 14 serfs, and 4 mills worth 70 shillings, and a fishery worth 3 pence, and 156 acres of meadow. There is wood(land) worth 22 swine (from the) pannage; and 3 burgesses worth 30 pence.

There are 2 churches, to which 2 hides less 1 virgate belong. Wibert the clerk holds (*ten*) them; and there the priest has half a plough. It is worth 60 shillings.

<sup>3</sup> Titchfield.

<sup>4</sup> Now Bountisborough Hundred.

<sup>5</sup> Now in Fawley Hundred.

<sup>6</sup> Now Mainsborough Hundred.

<sup>7</sup> Now Kings Sombourn Hundred.



## THE HOLDERS OF LANDS

The whole manor, T.R.E. and afterwards, was worth 24 pounds. It is now worth the same sum; but it is farmed (*est ad firmam*) for 30 pounds.

William Pevrel holds 1 hide of the same manor; but refuses to pay the (*dare*) geld. There he has 1 plough with 2 bordars, and 4 acres of meadow. It is worth 20 shillings.

Walter holds of the Bishop 1 hide of the same manor; and there he has 1 plough with 1 bordar. It is worth 22 shillings.

### IN MANTESBERG<sup>1</sup> HUNDRET

Durand holds WALDE [Wield] of the Bishop. Two freemen held it of the Bishop T.R.E., but they could not withdraw (*recedere cum terra*). It was then, as now, assessed at 10 hides. There is land for 9 ploughs. In (the) demesne are 5 ploughs; and (there are) 9 villeins and 6 bordars with 4 ploughs. T.R.E. it was worth, all together, 8 pounds; and afterwards 6 pounds; it is now worth 10 pounds. Of this manor, 2 freemen (*franci homines*) hold 1 hide; and there they have 1 plough with 1 bordar. It is worth 20 shillings.

### IN ESSELEI<sup>2</sup> HUNDRET

Rannulf holds TISTEDE [West Tisted] of the Bishop. It belongs to the bishopric (*de episcopatu est*). T.R.E. it was, and is now, assessed at 7 hides. There is land for 8 ploughs. In (the) demesne are 3 ploughs; and (there are) 15 villeins and 3 bordars with 3 ploughs. There are a church and 2 serfs.

T.R.E., and afterwards, it was worth 4 pounds; now 6 pounds.

### IN MANTESBERG<sup>3</sup> HUNDRET

Hugh de Port holds ABEDESTUNE [Abbotstone] of the Bishop. It did, and does now, belong to the bishopric (*de episcopatu est*). T.R.E. it was, and is now, assessed at 9 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 8 villeins and 6 bordars with 3 ploughs. There are 5 serfs, and 1 mill worth 15 shillings, and 5 acres of meadow. It was always, and is, worth 100 shillings.

Of this land Rainald holds 1½ hides, and there he has 1 plough and 1 acre of meadow. It is worth 20 shillings.

### IN TICEFELLE<sup>4</sup> HUNDRET

The Bishop himself holds BURNIEWIC [Brownwich in Titchfield] of the King, in fee. Ansgot holds it of the Bishop. It does not belong to the bishopric (*de episcopatu*). Edric held it of king Edward. It was then, and is now, assessed at 1 hide. There is land for 3 ploughs. In (the) demesne are 1½ ploughs; and (there are) 5 villeins and 11 bordars with 3 ploughs. There is 1 serf. It was always, and is, worth 4 pounds.

The Bishop himself holds BENEDLEI [Bentley] (which belongs to) the bishopric (*de episcopatu*). T.R.E. it was assessed at 10 hides; now at 8 hides. There is land for 10 ploughs. In (the) demesne are 2 ploughs; and (there are) 17 villeins and 5 bordars with 8 ploughs. There are 4 serfs, and 1 mill worth 10 shillings, and 10 acres of meadow. There is wood(land) for the fences.

Of this land, Osbern holds of the Bishop 1 hide and 1 virgate; and William holds 1½ hides. There are 2 ploughs in (the) demesne, and 3 villeins with 1 plough, and 1 acre of meadow. There is wood(land) worth 2 swine. The bishop's demesne was, and is, worth 12 pounds; Osbern's (portion is worth) 50 shillings; and William's (is worth) 20 shillings.

fo. 41.

## THE UNDERMENTIONED LANDS ARE FOR THE SUPPORT OF THE MONKS OF WINCHESTER

### IN FALEMERE HUNDRET

III. Bishop WALCHELIN holds CILTECUMBE [Chilcomb].<sup>5</sup> T.R.E. it was, and is, assessed at 1 hide. There is land for 68 ploughs. In (the) demesne are 12 ploughs; and (there are) 30 villeins and 115 bordars with 57 ploughs. There are 9 churches, and 20 serfs, and 4 mills worth 4 pounds, and 40 acres of meadow; 23 shillings and 5 pence (are paid for) the pasturage (*pro herbagio*). There is wood(land) worth 30 swine from the pannage.

Of the said hide (*sic*), William holds land for 3 ploughs. Manno held it. Cheping holds land for 1 plough. He held it himself. Walter holds land for 1 plough. Ælfer held

<sup>4</sup> Titchfield.

<sup>5</sup> Now the manor of 'Barton and Buddlegate' in Chilcomb, Winnal, Morestead, St. Faith, Compton, Week, Littleton, and Sparsholt.

<sup>1</sup> Now Bountisborough Hundred.

<sup>2</sup> Bishop's Sutton.

<sup>3</sup> Now Bountisborough.

# A HISTORY OF HAMPSHIRE

it. Hugh 'cementarius' holds land for 2 ploughs. Giraud' held it. Turstin Rufus holds land for 1 plough. Æilmer held it. Osbern holds land for 1 plough. Godwin held it. Turstin 'parvus' holds 30 acres. Ælfec held them. Those who held these lands T.R.E. could not withdraw to another lord with their land (*recedere cum terra ad alium dominum*). The present tenants have 7 ploughs in (the) demesne, and 7 villeins, and 30 bordars with 2 ploughs. There are 11 serfs, and 4 acres of meadow. The whole manor was worth, T.R.E., 73 pounds 10 shillings, and afterwards the same sum. What the monks now hold is worth 80 pounds; and what is held by tenants 24 pounds.

There appertained (*adjacuerunt*) to this manor, T.R.E., 6 hides, which Ralf de Mortemer now holds; but he performs no service to the church.<sup>1</sup>

## IN BITELESJET<sup>2</sup> HUNDRET

The Bishop himself holds NOTESSELINGE [Nursling]. It was always the minster's (*in monasterio*). T.R.E. it was, and is now, assessed at 5 hides. There is land for 6 ploughs. In (the) demesne is 1 plough; and (there are) 21 villeins and 8 bordars with 10 ploughs. There are a church, and 1 serf, and 1 mill worth 22 shillings and 8 pence, and 140 acres of meadow. There is wood(land) worth 5 swine (from the) pannage. T.R.E. it was worth 8 pounds, and afterwards 100 shillings; now 9 pounds; but it pays 10 pounds.

The Bishop himself holds CILBODENTUNE [Chilbolton]. It was always the minster's (*in monasterio*). T.R.E. it was assessed at 10 hides, now at 5 hides. There is land for 7 ploughs. In (the) demesne are 2 ploughs; and (there are) 11 villeins and 11 bordars with 7 ploughs. There are a church and 4 serfs, and a mill worth 15 shillings, and 30 acres of meadow. T.R.E., and afterwards, it was worth 12 pounds; now 15 pounds.

Of the land of this manor, the Bishop has only 5 hides and 3 virgates; and this is (*h' e'*) land for 7 ploughs. Richard Sturmid holds the remaining hides. A certain steward (*præfectus*) held them, and could not betake himself anywhere; and of those hides, he had 2 by villein tenure (*quasi villanus*).

## IN FALELIE<sup>3</sup> HUNDRET

The Bishop himself holds AVINTUNE [Avington]. It was always the church's (*in ecclesia*). T.R.E. it was, as now, assessed at 5 hides. There is land for 5 ploughs; in (the) demesne are 2 ploughs; and (there are) 8 villeins and 3 bordars with 4 ploughs. There are a church, and 3 serfs, and 16 acres of meadow. T.R.E. it was worth 6 pounds, and afterwards 100 shillings; now 10 pounds.

## IN EVINGARE HUNDRET

The Bishop himself holds WITCERCE [Whitchurch]. It was always the minster's (*in monasterio*). T.R.E. there were here 50 hides; and it was then assessed at 38 hides; now at 33 hides. There is land for 33 ploughs. In (the) demesne are 5 ploughs; and (there are) 42 villeins and 50 bordars with 28 ploughs. There are 10 serfs, and 3 mills worth 40 shillings, and 15 acres of meadow. There is wood(land) worth 40 swine. T.R.E., and afterwards, it was worth 30 pounds; now 35 pounds.

Of this manor and of these hides Ralf the son of Seifrid holds 1 manor, called FRIGEFOLC [Freefolk], which was assigned to the support (*fuit de victu*) of the monks. Ednod held it of the Bishop, and could not betake himself (*ire*) anywhere. It was then assessed at 9 hides; now at 4 hides, with the others above-mentioned. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins and 17 bordars with 2 ploughs. There are 5 serfs, and a mill worth 20 shillings, and 4 acres of meadow. T.R.E., and afterwards, it was worth 16 pounds; now 10 pounds.

Of the same manor, William de Fécamp (*Fiscanno*) holds 7 hides in Windenaie [Witnal in Whitchurch] and in 2 other places. 2 thegns held them under the Bishop, and were not at liberty to betake themselves (*ire*) anywhere; and (these hides) paid geld with the above hides. There is land for 7 ploughs. In (the) demesne are 4½ ploughs; and (there are) 8 villeins and 11 bordars with 3½ ploughs. There are 18 serfs, and a mill worth 20 shillings, and 4 acres of meadow. T.R.E., and afterwards, it was worth 10 pounds; now 7 pounds.

Of the same manor Mauger holds 1 hide of villeins' land; and there he has 2 villeins

<sup>1</sup> See, for details, his fief below.

<sup>2</sup> Now part of Buddlesgate.

<sup>3</sup> Part of Fawley.



## THE HOLDERS OF LANDS

and 1 bordar with 1 plough. It is worth 20 shillings. Alvríc the priest holds the church of this manor with 1 hide; and there he has, in (the) demesne, 1 plough with 3 bordars and 3 acres of meadow. It is worth 20 shillings.

The Bishop himself holds EISSEBURNE [Hurstbourne Priors]. It was always the minster's (*in monasterio*). T.R.E. it paid geld for 38 hides, and does now. There is land for 51 ploughs. In (the) demesne are 4 ploughs; and (there are) 55 villeins and 38 borders with 45 ploughs. There are 14 serfs, and 5 mills worth 25 shillings; and 30 acres of meadow. There is wood(land) worth 20 swine. T.R.E. it was worth 36 pounds, and afterwards 26 pounds; now 40 pounds.

Of this manor, Geoffrey holds 5 hides, of the Bishop, in the same vill. Three thegns held them of the Bishop, and could not betake themselves (*ire*) anywhere. Each of them had a hall. In (the) demesne are 3 ploughs; and (there are) 19 bordars and 2 serfs, and a mill worth 12 shillings and 6 pence, and 20 acres of meadow. It was worth 8 pounds; now 6 pounds.

Of the same manor, Richer holds, of the Bishop, 2 hides. Alnod held them, and could not betake himself (*ire*) elsewhere. In (the) demesne there are 1 plough and 9 bordars, and 3 serfs, and 5 acres of meadow. There is wood(land) worth 3 swine (from the) pannage. It is worth 60 shillings.

Of the same (*ipso*) manor, William holds of the Bishop 2 hides less half a virgate. Sawin held them of the Bishop, and could not betake himself (*ire*) anywhere. There is 1 plough, with 1 villein and 12 bordars with 1 plough, and 4 acres of meadow. It was worth 6 pounds; now 40 shillings.

Lewin holds, of the Bishop, 1 hide, with the church; and there he has a team of 7 oxen (*vii boves in caruca*), and 2 acres of meadow. It was, and is, worth 50 shillings.

The Bishop himself holds CLERE [Clere].<sup>1</sup> It was always the church's (*in æcclesia*). T.R.E. it was assessed at 10 hides; now at 7½ hides. There is land for 17 ploughs. In (the) demesne is 1 plough; and (there are) 20 villeins and 18 bordars with 15 ploughs; and (there are) 24 coliberts, and 3 serfs, and a mill worth 30 pence, and 6 acres of meadow. There is wood(land) worth 10 swine. T.R.E. it was worth 12 pounds and 38 pence, and afterwards 7 pounds; now 11 pounds.

Alvríc the priest holds, of the Bishop, 1

hide, with the church; and there he has 1 plough with 1 bordar, and 2 serfs and 1 acre of meadow. It is worth 40 shillings.

### IN CORONDEL <sup>2</sup> HUNDRET

The Bishop himself holds CRUNDELE [Cron-dal].<sup>3</sup> It was always the church's (*in ecclesia*). There were 50 hides T.R.E.; and then, as now, they paid geld for 40 hides. There is land for 29 ploughs. In (the) demesne are 4 ploughs; and (there are) 45 villeins and 11 bordars with 25 ploughs. There is a church worth 20 shillings, and 12 serfs. There is wood(land) worth 80 swine from the pannage. T.R.E. it was worth 15 pounds 10 shillings, and afterwards 6 pounds; now 24 pounds.

Of the land of this manor, German holds, of the Bishop, 8 hides in Ticelle [Itchell]<sup>4</sup> and in Coue [Cove].<sup>5</sup> Lewin and Ulward held them of the Bishop in parage (*in paragio*), and could not betake themselves (*ire*) anywhere. Each of them had a hall. (But) when German received it, there was 1 hall only. In (the) demesne he has 3 ploughs, and (there are) 20 villeins, and 10 bordars with 6 ploughs; and (there are) 6 serfs, and a mill worth 3 shillings, and 2 acres of meadow. There is wood(land) worth 15 swine (from the) pannage. It was worth 6 pounds, and afterwards 40 shillings; now 8 pounds.

Of the same manor William holds, of the Bishop, 3 virgates in Beddelie [Clare Park]. Alvríc held them, of the Bishop, as a villein (*quasi villanus*). There is 1 plough, with 1 bordar, and 4 serfs.

fo. 41b.

Of the same manor, Turstin holds 7 hides in Sudtune [Long Sutton]. Justan and Lefsi held them, of the Bishop, in parage (*in paragio*), but could not betake themselves (*ire*) anywhere. They had 2 halls. There are, in (the) demesne, 3 ploughs, and (there are) 3 villeins and 4 bordars with half a plough. T.R.E. it was worth 7 pounds, and now the same. When (Turstin) received (it), it was worth 4 pounds.

Of the same manor, Odin de Windesores holds, of the Bishop, 3 hides in Ferneberga [Farnborough]. Alwin held them, of the Bishop, in parage (*in paragio*); and could not

<sup>2</sup> Crondal, forming the extreme north-eastern portion of the county.

<sup>3</sup> See, for this manor, the monograph on it published by the Hampshire Record Society.

<sup>4</sup> Now Ewshott in Crondal.

<sup>5</sup> In Yately.

<sup>1</sup> Highclere or Burghclere or both.

## A HISTORY OF HAMPSHIRE

betake himself (*ire*) anywhere. There is now in (the) demesne 1 plough; and (there are) 7 villeins and 4 bordars with 3 ploughs. There are 5 serfs, and a mill worth 10 pence, and 3 acres of meadow. There is wood(land) worth 6 swine. T.R.E. it was, as now, worth 60 shillings; when (Odin) received (it, it was worth) 40 shillings.

### IN DROCHENEFORD HUNDRET

The Bishop himself holds DROCHENEFORD [Droxford]. It was always the church's (*in ecclesia*). T.R.E. it was assessed at 16 hides; now at 14 hides. There is land for 16 ploughs. In (the) demesne are 2 ploughs; and (there are) 32 villeins and 13 bordars with 14 ploughs. There are 6 serfs, and a church worth 20 shillings. And (there are) 2 mills worth 15 shillings and 2 pence; for the gain arising from the land (*pro lucro terræ*)<sup>1</sup> (are received) 12 shillings; and (there are) 10 acres of meadow. There is wood(land) worth 40 swine (from the) pannage. T.R.E. it was, and is now, worth 26 pounds. When received, it was worth 20 pounds.

Of the same manor, Hugh de Port, holds, of the Bishop, 2 hides in Benstede [Binstead]. Agemund<sup>2</sup> held them of the Bishop, and could not betake himself (*ire*) anywhere. There are in (the) demesne 2 ploughs; and (there are) 3 villeins and 3 bordars with 1 plough. There are 6 serfs, and a mill worth 10 shillings, and 7 acres of meadow. There is wood(land) worth 5 swine. From the pasture is received 10 pence. T.R.E., as now, it was, worth 60 shillings. When (Hugh) received (it, it was worth) 40 shillings.

Of this chief manor (*capit' Manerio*) Ralf de Mortemer holds, by force,<sup>3</sup> half a virgate which belonged to it (*ibi erat*) T.R.E., although the monks discharge its geld (*ad-quietant eam de geldo*).

Ralf, the son of Seifrid, holds, of the Bishop, POLEM'TUNE [Polhampton in Overton]. T.R.E. it was for the support of the monks (*de victu monachorum*). It was then assessed

at 5 hides; now at 3½ hides. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 16 bordars, with 2 ploughs; and (there are) 2 mills worth 33 shillings, and 3 acres of meadow. There is wood(land) worth 2 swine. T.R.E. it was worth 8 pounds; and afterwards, as now, 7 pounds 10 shillings.

### IN MENESTOCH<sup>4</sup> HUNDRET

The Bishop himself holds ESSESENTUNE [Exton]. It was always the church's (*in ecclesia*). T.R.E. it was assessed at 12 hides; now at 8 hides. There is land for 6 ploughs.

In (the) demesne are 2 ploughs; and (there are) 13 villeins, and 24 bordars, with 5 ploughs. There are a church, and 2 mills worth 20 shillings, and 4 acres of meadow. T.R.E. it was worth 16 pounds, and afterwards 12 pounds; now 20 pounds; although it is bound (*debeat*) to pay 30 pounds; it cannot, however, bear (it).

Of the land of this manor, Leuing held, and now holds, 2 hides; they paid geld with the other hides. There he has, in (the) demesne, 1 plough, and 3 villeins, and 3 bordars, and 3 serfs, and a mill worth 2 shillings, and 1½ acres of meadow. It is worth 40 shillings.

The Bishop himself holds ALWARESTOCH [Alverstoke]. It was always the minster's (*in monasterio*). T.R.E. it was assessed at 16 hides; and king Edward lowered it to (*condonavit ut esset*) 10 hides, and it remains so now. It was, and is now, held by villeins.<sup>5</sup> There are 48 villeins with 15 ploughs. There is wood(land) worth 2 swine. There is land for 15 ploughs. It was always, and is now, worth 6 pounds. Of the land of this manor one knight holds half a hide, which paid geld with the other hides. Sawin held it, but could not betake himself (*ire*) anywhere. There is 1 plough with 2 bordars. It is worth 25 shillings.

The Bishop himself holds ORDIE [Worthy].<sup>6</sup> It was always the minster's (*in monasterio*). T.R.E. it was, as now, assessed at 3 hides. There is land for 4 ploughs. In (the) demesne are 3 ploughs; and (there are) 7 vil-

<sup>1</sup> I take this somewhat difficult phrase to be equivalent to 'de locatione terre' (fo. 260), and to refer to money rents. A similar phrase is employed by the Peterborough Survey, a generation later, under Irtlingborough (Northants): 'de mercede terrarum et pratorum xx solidi' (*Chronicon Petroburgense*, p. 166).

<sup>2</sup> Possibly the 'Aghemund,' who was Hugh de Port's 'anteccessor' and under-tenant at Chineham.

<sup>3</sup> 'per vim' interlined.

<sup>4</sup> Meonstoke.

<sup>5</sup> See, on this entry, the Introduction.

<sup>6</sup> I take this to be the Worthy which was made over to Hyde Abbey, by the bishop, under Henry I., in exchange for the site of the New Minster within the walls.



## THE HOLDERS OF LANDS

leins and 9 bordars with 1 plough. There are a church, and 7 serfs, and a mill worth 25 shillings, and 6 acres of meadow. T.R.E. it was, as now, worth 8 pounds. When received, it was worth 6 pounds.

### IN BERTUNE<sup>1</sup> HUNDRET

The Bishop himself holds WENESISTUNE [Wonston]. It was always the minster's (*in monasterio*). T.R.E. it was assessed at 10 hides; now at 7 hides. There is land for 7 ploughs. In (the) demesne are 2 ploughs; and (there are) 10 villeins and 6 bordars with 5 ploughs. There are a church, and 10 serfs, and a mill worth 7 shillings and 6 pence. T.R.E., and afterwards, it was worth 8 pounds; now 10 pounds.

Richer the clerk holds BRANDEBEREE [Bransbury in Barton Stacey], and claims it of the Bishop as his right (*reclamat de episcopo*). Abbot Alsi<sup>2</sup> held it of Stigand, and of the monks T.R.E. and it was for the support of the monks (*de victu eorum*). It was then, as now, assessed at 4 hides. There is land for 4 ploughs; in (the) demesne is 1 plough; and (there are) 5 villeins and 7 bordars with 2 ploughs. There is a mill worth 15 shillings. T.R.E. it was worth 100 shillings, and afterwards 4 pounds; now 6 pounds.

### IN MANEBRIGE<sup>3</sup> HUNDRET

The Bishop himself holds STANHAM [South Stoneham]. It is appropriated to the clothing of the monks (*De vestitu monachorum est*). T.R.E. it was assessed at 5 hides; now at 3 hides. There is land for 9 ploughs. In (the) demesne is 1 plough; and (there are) 11 villeins and 9 bordars with 8 ploughs. There are 1 serf and 23 acres of meadow, and 2 fisheries worth 39 pence. There is wood(land) worth 20 swine. T.R.E., it was worth 7 pounds, and afterwards 4 pounds; now 8 pounds.

Richer the clerk holds the church of this manor, together with 2 other churches near Hantone [Southampton], which belong to this (as) the mother church; and to this church appertains (*ibi adjacet*) 1 hide of land, which he holds; he has also all the tithes of the said vill and also of the King's land. What he holds of the Bishop is worth 20 shillings; and what (he holds) of the King is worth 20 shillings.

The Bishop himself holds MELEBROC [Milbrook]. It was always the minster's (*in monasterio*). T.R.E., as now, it was assessed at 5 hides. It was, and is, held by villeins.<sup>4</sup> There is no hall there. There is land for 5 ploughs; there are 28 villeins with 5 ploughs, and 14 acres of meadow. There is wood(land) worth 5 swine. T.R.E., and afterwards, as now, it was worth 100 shillings.

The Bishop himself holds HENTUNE [Hinton Ampner]. It was always the minster's (*in monasterio*). There are 8 hides. T.R.E., as now, it paid geld for 5 hides. There is land for 8 ploughs. In (the) demesne are 3 ploughs, and (there are) 15 villeins and 14 bordars with 5 ploughs. There are 6 serfs, and 8 acres of meadow. There is wood(land) worth 10 swine. There is a church worth 40 shillings, but it pays 50 shillings. T.R.E., as now, it was worth 8 pounds. When received, (it was worth) 100 shillings.

### IN RODBRIDGE<sup>5</sup> HUNDRET

The Bishop himself holds 2 hides in demesne in FALEGIA [Fawley], which were always the minster's (*in monasterio*), and were assessed at 2 hides, but now (are assessed) at 1 virgate only, because the 7 remaining (virgates) are in the forest. On this virgate are 3 villeins and 5 bordars with 2 ploughs. There are a chapel (*æcclesiola*), and 4 acres of meadow; and there is land for 1 plough. T.R.E., and afterwards, it was worth 60 shillings; now 15 shillings.

### IN CLERE<sup>6</sup> HUNDRET

The Bishop himself holds ECCLESWELLE [Itchingswell]. It was always the minster's (*in monasterio*). T.R.E. it was assessed at 10 hides; now at 7½ hides. There is land for 11 ploughs. In (the) demesne are 2 ploughs; and (there are) 18 villeins and 12 bordars with 9 ploughs. There are 2 serfs, and 2 mills worth 100 pence, and 3 acres of meadow. T.R.E. it was worth 7 pounds, and afterwards 6 pounds; now 8 pounds.

The Bishop himself holds HANITUNE [Hannington]. It was always the minster's (*in monasterio*). T.R.E. it was assessed at 7 hides; now at 6½ hides and 2 thirds of a virgate. There is land for 8 ploughs. In (the) demesne are 2 ploughs; and (there are) 17 villeins and 7 bordars with 7 ploughs.

<sup>1</sup> Barton Stacey.      <sup>2</sup> ? of Ramsey.  
<sup>3</sup> Mansbridge.

<sup>4</sup> See, on this entry, the Introduction.  
<sup>5</sup> Redbridge.      <sup>6</sup> Kingsclere.

## A HISTORY OF HAMPSHIRE

There are a church and four serfs. T.R.E. it was worth 100 shillings, and afterwards 6 pounds; now 8 pounds; but it is farmed (*est ad firmam*) for 15 pounds.

### IN ODINGETONE HUNDRET<sup>1</sup>

The Bishop himself holds ODINGETONE [Hoddington in Upton Gray]. T.R.E. it was assessed at 5 hides; now at 2 hides. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 3 villeins and 9 bordars with 2 ploughs. T.R.E., and afterwards, as now, it was worth 4 pounds.

### IN PORTESDONE<sup>2</sup> HUNDRET

In BOREHUNTE [Boarhunt] the bishop of Winchester's monks have half a hide, belonging to the bishopric (*de episcopatu*); and it is for their support (*de victu monachorum*). It is assessed at half a hide. There is only 1 villein there. It is worth 6 shillings and 6 pence.

### IN CILLEI HUNDRET

The monks of the bishopric of Winchester hold ODETONE [Wootton St. Lawrence]. T.R.E. it was, as now, assessed at 20 hides. There is land for 20 ploughs. In (the) demesne are 2 ploughs; and (there are) 27 villeins and 14 bordars with 15 ploughs. There

fo. 43

are 10 serfs and 4 acres of meadow. There is wood(land) worth 5 swine. T.R.E. it was worth 15 pounds, and afterwards 16 pounds; now 20 pounds; but it pays 28 pounds 12 shillings and 6 pence.

### IN BOSEBERG<sup>3</sup> HUNDRET

The monks of the bishopric of Winchester hold HELINGHEI [Hayling Island]. They always held it. T.R.E. it paid geld for 5 hides; now for 4 hides. There is land for 2 ploughs. There are 11 villeins with 3½ ploughs, and 1 acre of meadow. There is wood(land) worth 1 pig. T.R.E. it was worth 100 shillings, and afterwards 4 pounds; and now (it is worth) 4 pounds 10 shillings.

The monks of the bishopric of Winchester hold BROCHEMATUNE [Brockhampton]. They always held it. T.R.E. it was assessed at

6 hides; now at 4 hides. There is land for 3 ploughs. There are 14 villeins with 4 ploughs, and a mill worth 15 shillings, and 4 acres of meadow. There is wood(land) worth 20 swine. BROCHEMATUNE [Brockhampton] was, and is now, worth 100 shillings.<sup>4</sup>

The monks of the bishopric of Winchester hold HAVEHUNTE [Havant]. They always held it. T.R.E. it paid geld for 10 hides; now for 7 hides. There is land for 4 ploughs. There are 20 villeins with 6 ploughs; and 2 mills worth 15 shillings; and 3 salt pans worth 15 pence. There is wood(land) worth 10 swine. It was, and is now, worth 8 pounds.

fo. 42.<sup>5</sup>

### WHAT ARCHBISHOP THOMAS HOLDS

#### IN BROCTONE<sup>6</sup> HUNDRET

III. THOMAS archbishop (of York) holds, in the manor of MORTESFUNDE [Mottisfont], 1 church and 6 chapels, with all customary dues (*consuetudine*) from the living and the dead. In Brestone [Broughton] (there is) 1 chapel. In Puteorde [Pitteworth], 1. In Tiderlege [Tytherley], 1. In another Tiderlege [Tytherley], 1. In Dena [Dean], 1. In Locherlei [Lockerley], 1. There belong to this church 5 hides less 1 virgate. His predecessor held it, in the same manner, of king Edward. Then, as now, (it was assessed) at 4 hides less 1 virgate. In (the) demesne is 1 plough; and (there are) 5 villeins and 5 bordars, with 2 ploughs; 39½ acres of meadow belong to it. There is wood(land) for the fences. Also 1 haw (*baga*) in Wincestre [Winchester] worth 30 pence. The King's reeves (*prepositi*) took from these 5 hides, 1 hide, and 12½ acres of meadow, and a grove (*gravam*), and 1 pasture (ground), as (the jurors of) the Hundred declare. Cava the reeve did this without the knowledge of Hugh de Port. The whole, T.R.E., was appraised at 4 pounds; afterwards at 3 pounds. It is now (appraised) at 4 pounds and 30 pence. The hide which is wanting was, and is now, worth 10 shillings.<sup>7</sup>

<sup>4</sup> This last clause is added lower down in the column.

<sup>5</sup> This is the interpolated folio.

<sup>6</sup> Thorngate.

<sup>7</sup> Here follow, on the added leaf (fos. 42, 42b), the omitted manors of the New Minster. They will be found printed below.

<sup>1</sup> Now part of Odiham Hundred.

<sup>2</sup> Portsdown.

<sup>3</sup> Bosmere.



## THE HOLDERS OF LANDS

fo. 42.

### THE LAND OF BISHOP OSBERN

#### IN NETEHAM<sup>1</sup> HUNDRET

V. OSBERN bishop of EXECESTRE [Exeter] holds FERENDONE [Farringdon] of the King. Godwin the priest held it of king Edward. It belongs to the church (*in ecclesia*) of BOSEHAM [Bosham]. It was then assessed at 10 hides; now at 5 hides. There is land for 10 ploughs. In (the) demesne is 1 plough; and (there are) 11 villeins and 20 bordars with 8 ploughs. There are 2 serfs, and 12 acres of meadow. There is wood(land) worth 30 swine. T.R.E. it was worth 15 pounds, and afterwards 12 pounds. It is now worth 21 pounds.

### [THE LAND OF MONT ST. MICHEL]<sup>2</sup>

#### IN BASINGESTOCHS<sup>3</sup> HUNDRET

The church of ST. MICHAEL of the Mount [Mont St. Michel] holds 1 church of the King, together with 1 hide and the tithe of the manor of Basingestoches [Basingstoke]. There is a priest, and 2 villeins, and 4 bordars with 1 plough, and a mill worth 20 shillings, and 2 acres of meadow. The whole is worth 4 pounds 5 shillings. Walter the bishop (of Hereford) held it of king Edward; but it did not belong to his bishopric (*de episcopatu suo*).

fo. 42.

### [THE LAND] OF ST. PETER OF WINCHESTER<sup>4</sup>

#### IN MANESBERG<sup>5</sup> HUNDRET

The abbey of St. Peter of Winchester holds CANDEVRE [Brown Candover]. T.R.E. it belonged to that minster (*fuit in ipso monasterio*), and was assessed at 20 hides. 11 of these are in demesne. There is land for 18<sup>6</sup> 9 ploughs. In (the) demesne is 1 plough; and (there are) 13 villeins and 4 bordars with 8

ploughs. There are 9 serfs, and 10 acres of meadow.

Of the land of the same manor, Hugh de Port holds 2½ hides of the Abbot. One hide is of demesne land (*dominica terra*). T.R.E. Airaf possessed this land. In (the) demesne is 1 plough; and 3 serfs, and 1 acre of meadow.

Of the said land of the same manor, Alsi the son of Brixi holds 1 manor, called UDEMANECOTE [Woodmancote], of the abbey. It is of demesne land (*dominica terra*). T.R.E. it was, as now, assessed at 6 hides and 2½ virgates of land. In (the) demesne are 3 ploughs; and (there are) 3 villeins with 2 ploughs; and 1 acre of meadow.

The whole manor, T.R.E., was worth 13 pounds, and afterwards the same sum. That part which belongs to the Abbot is now worth 8 pounds, but it is farmed (*est ad firmam*) at 10 pounds; Hugh's is worth 20 shillings; Alsi's, 7 pounds.

These 20 hides, of this manor, are now assessed at 13 hides and 2½ virgates.

The same abbey holds, in SUMBURNE HUNDRET, FUGELERESTUNE [Fullerton in Wherwell]. It was always the minster's (*in monasterio*). T.R.E. it was assessed at 5 hides; now at 1 hide. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 4 bordars with 1 plough. There are 4 serfs, and a mill worth 10 shillings, and 4 acres of meadow. It was worth 50 shillings; now 60 shillings.

The same abbey holds LECHTFORD [Leckford] in the same Hundred. T.R.E. it was assessed at 5 hides; (it is) now (assessed) at 2½ hides. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 4 bordars with 1 plough. There are 2 serfs, and 1 mill and a half worth 22 shillings and 6 pence, and 20 acres of meadow. T.R.E., and afterwards, it was worth 3 pounds. It is now worth 4 pounds.

#### fo. 42b. IN MICELDEVRE<sup>7</sup> HUNDRET

THE ABBEY OF ST. PETER's of Wincestre [Winchester] holds MICELDEVRE [Mitcheldever] in demesne. T.R.E. it was assessed at 106 hides; it is now assessed at 83 hides and half a virgate. There is land for 72 ploughs. In (the) demesne are 9 ploughs; and 64 villeins and 28 bordars have 25 ploughs. There are 22 serfs, and a mill

<sup>1</sup> Alton and Selbourne.

<sup>2</sup> This entry, being added afterwards in a blank space, has no heading.

<sup>3</sup> Basingstoke.

<sup>4</sup> The New Minster, afterwards Hyde Abbey.

<sup>5</sup> Mainsborough.

<sup>6</sup> *Sic.* The 'ix.' is not subpunctuated for deletion.

<sup>7</sup> Mitcheldever.

## A HISTORY OF HAMPSHIRE

worth 30 pence, and 30 acres of meadow. There is wood(land) worth 4 swine from the pannage.

Of this land of this manor, Hugh de Port holds, of the Abbot, 22½ hides and 1 virgate; 3 hides and 3 virgates are of the demesne land<sup>1</sup> (*dominica terra*); 4 freemen held, T.R.E., of the abbey, as 4 manors, Gramborne [Cranbourne],<sup>2</sup> Draitone [Drayton],<sup>3</sup> Stratune [West Stratton],<sup>4</sup> (and) Popeham [East Popham]; and could not withdraw themselves (*recedere cum terra*), according to the testimony of the men of that Hundred. There are in (the) demesne 6½ ploughs; and (there are) 6 villeins and 12 bordars with 1½ ploughs. There are 7 serfs, and 24 acres of meadow.

Of the same land of the same manor, Herbert the chamberlain holds 7 hides. Three freemen held (them) T.R.E. Odo the steward (*dapifer*) holds 5 hides of the demesne land. Waleran the huntsman holds 4½ hides (also) of the demesne land. In (the) demesne are 6 ploughs; and (there are) 9 villeins and 9 bordars with 4 ploughs. There are 2 serfs, and 5 acres of meadow.

Of the same land of the same manor, Alsì holds 6 hides. His father held it. And Eldred, Odo's brother, (holds) 1½ hides. His wife held it, in dower, T.R.E. Seward the huntsman holds 2 hides. He held (them) himself T.R.E. In (the) demesne are 6½ ploughs; and (there are) 5 villeins, and 2 bordars, with 1½ ploughs. There are 19 serfs, and 7 acres of meadow.

The whole manor was worth, T.R.E., 60 pounds. When received, it was worth 40 pounds. The demesne of the Abbot is now worth 57 pounds. That part held by Hugh de Port (is worth) 19 pounds; and what Herbert (holds is worth) 100 shillings; Odo's (share is worth) 50 shillings; that of Waleran, 60 shillings; that of Alsì, 100 shillings; that of Eldred, 30 shillings; and that of Seward, 20 shillings.

In another place, Alsì holds 1 hide of the demesne land of this manor; and there are there 4 villeins who pay 7 shillings.

The same abbey holds ORDIE [Abbot's Worthy] in demesne. It always was the min-

ster's (*in ipso monasterio*). There are 7 hides, but it never paid geld. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins and 9 bordars who have no ploughs. There are 4 serfs, and a mill worth 20 shillings, and 63 acres of meadow. The abbey has besides 72 acres of meadow, which king Edward gave to the same church; and pasture called Moor (*moram*); (and) 80 acres of meadow.

All these were worth, T.R.E., 6 pounds, and afterwards 110 shillings. They are now worth 6 pounds 10 shillings.<sup>5</sup>

fo. 43.

### THE LAND OF ST. PETER OF WINCHESTER<sup>6</sup>

#### IN NETEHAM<sup>7</sup> HUNDRET

VI. THE ABBOT OF ST. PETER'S of Winchester [Winchester] holds AULTONE [Alton]. Queen Eddid held it T.R.E. There were then 10 hides; and the villeins who dwelled there paid geld for 5 hides. The Abbot has now 5 hides in demesne, but they have not paid geld. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 11 bordars and 2 serfs with 2 ploughs; and half a mill worth 4 shillings and 7 pence, and 2 acres of meadow. There is wood(land) for the fences. T.R.E. it was worth 6 pounds; it was afterwards, as now, worth 7 pounds.

The county (court) testifies, of this manor, that the Abbot received it unjustly, in exchange for the King's house, because the house was the King's (own).

Of this same manor (of) AULTONE [Alton], the King holds 5 hides, as part of his ferm (*ad firmam suam*), which are held by Herding; and they have not paid geld.<sup>8</sup>

#### IN CILLEI<sup>9</sup> HUNDRET

The same abbey holds WORTINGES [Worting]. T.R.E., as now, it was assessed at 5 hides. There is land for 5 ploughs. In

<sup>5</sup> The above manors of St. Peter's [the New Minster] having been omitted by the scribes, were entered on the inserted leaf.

<sup>6</sup> The New Minster, afterwards Hyde Abbey.

<sup>7</sup> Alton and Selbourne.

<sup>8</sup> This last clause (from 'Of this same') is added, as a rider, in the MS. at the foot of the column, and should, apparently, be inserted here.

<sup>9</sup> Chuteley.

<sup>1</sup> These were at Swarraton.

<sup>2</sup> In Wonston.

<sup>3</sup> In Barton Stacey.

<sup>4</sup> East Stratton, according to Mr. Moody. But the *Nomina Villarum* (1316) proves that the Abbey retained East Stratton in demesne, while West Stratton, with Cranbourne, etc., was held of it in fee.



## THE HOLDERS OF LANDS

(the) demesne are 2 ploughs; and (there are) 4 villeins and 9 bordars with 2 ploughs. There are 2 serfs and a church. It was, and is, worth 100 shillings.

The same abbey holds BIGHETONE [Bighton]. T.R.E. it was assessed at 10 hides; now at 7 hides. There is land for 8 ploughs. In (the) demesne are  $1\frac{1}{2}$  ploughs, and (there are) 8 villeins and 3 bordars with 3 ploughs. There are a church, and 3 serfs, and 3 acres of meadow. There is wood(land) worth 10 swine. Of this manor, Fulchered holds 2 hides, (and) Borghill 2 hides. There are in (the) demesne 2 ploughs, and (there are) 3 villeins and 6 bordars with  $1\frac{1}{2}$  ploughs. There are 3 serfs. T.R.E. the whole manor was worth 100 shillings; afterwards 6 pounds. What the abbey holds is now worth 8 pounds; and what is held by tenants (*homines*), 4 pounds.

### IN PORTESDON<sup>1</sup> HUNDRET

Hugh de Port holds BETAMETONE [Bedhampton] of the abbey. Alsi held it of the abbot. T.R.E., as now, it was assessed at 10 hides. There is land for 8 ploughs. In (the) demesne is 1 plough; and (there are) 12 villeins, and 7 bordars, with 7 ploughs. There are a church, and 7 serfs, and 2 mills for (the use of) the hall; and 2 saltpans worth 37 shillings and 8 pence; and 3 acres of meadow. There is wood(land) worth 30 swine. T.R.E., as now, it was worth 12 pounds. When received, (it was worth) 10 pounds.

### IN MENESTOCH<sup>2</sup> HUNDRET

Ruald holds LAMMERE [Lomer in Corhampton] of the abbey. Alward held it of the abbot. He bought it, T.R.E., to hold for his own life only; and paid the abbot 6 *sestiers* of wine yearly. It was then, as now, assessed at 3 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 6 villeins and 3 bordars with 3 ploughs. There are a church, and 3 acres of meadow, and 2 serfs.

Of this land, 1 tenant (*homo*) of the abbot (holds) 1 virgate.

The whole, T.R.E. and afterwards, was worth 6 pounds. It is now worth 100 shillings. What the tenant holds (is worth) 20 shillings.

Hugh de Port holds WARNEFORD [Warnford] of the abbey of St. Peter's. Alward

and Ketel held it of the abbot, and could not betake themselves (*ire*) anywhere. It was then, and is now, assessed at 8 hides. There is land for 6 ploughs. In (the) demesne are 3 ploughs; and (there are) 8 villeins and 6 bordars with 3 ploughs. There are 6 serfs, and a mill worth 10 shillings, and 8 acres of meadow. T.R.E. it was, and is now, worth 8 pounds. When received, (it was worth) 6 pounds.

### IN BASINGESTOC<sup>3</sup> HUNDRET

The same Hugh holds LICHPET [Lickpit]<sup>4</sup> of St. Peter's abbey. T.R.E. it was, and is now, assessed at 2 hides. There is land for 2 ploughs, which are in (the) demesne, with 8 bordars, and 5 serfs, and 5 acres of meadow. It was, and is now, worth 60 shillings.

### IN MANEBRIGE<sup>5</sup> HUNDRET

The same abbey holds STANEHAM [North Stoneham]. It was always the minster's (*in monasterio*). T.R.E., as now, it was assessed at 8 hides. There is land for 11 ploughs. In (the) demesne are 2 ploughs; and (there are) 28 villeins and 7 bordars with 9 ploughs. There are a church, and 13 serfs, and 2 mills worth 30 shillings, and 224 acres of meadow. There is wood(land) worth 20 swine. From the pasture comes 2 shillings. T.R.E. it was worth 12 pounds, and afterwards, as now, 10 pounds.

In CLERE [Kingsclere], St. Peter's abbey holds 1 church, and 4 hides and 1 virgate of land. These were given to the abbey (*ecclesiæ*) by king William, in exchange for the land on which is the King's house in the city. T.R.E. it was assessed at 4 hides and 1 virgate; now at nothing. They vouch the King for its exemption from geld (*Revocant regem pro geldo*). Queen Eddid held this (estate); and there was a hall. There is land for 4 ploughs. In (the) demesne is 1 plough, and (there are) 3 villeins and 14 bordars with 3 ploughs. There are 2 serfs, and a mill worth 5 shillings, and 2 acres of meadow.

<sup>3</sup> Basingstoke.

<sup>4</sup> I identify this as Lickpit farm in Basing, and I find it held of St. John by William de Braboef, as 'Likputt' in 12 Ed. I. Mr. Moody identified it with the parish of Litchfield in Clere Hundred, assigning the Domesday hundredal heading to an error. I identify below the latter place in 'Liveselle.'

<sup>5</sup> Mansbridge.

<sup>1</sup> Portsdown.

<sup>2</sup> Meonstoke.

## A HISTORY OF HAMPSHIRE

For the pasturage (*herbagio*) (is paid) 8 pence. T.R.E. it was worth 7 pounds; and afterwards, and now, 6 pounds.<sup>1</sup>

The same abbey has half a hide in TACEBERIE [Tatchbury in Eling]. Ezi the sheriff held it of king Edward, in parage (*in paragio*); and after the death of king Edward, he gave it to the same abbey (*ecclesiæ*), for (the repose of) his soul, before king William had come. It did not pay geld. It is waste; but it is, and always was, worth 10 shillings.

### IN ANDOVERE<sup>2</sup> HUNDRET

The same abbey holds ANNA [Abbot's Anne]. It always was the church's (*in ecclesia*). T.R.E. it paid geld for 15 hides; now for 8 hides. There is land for 9 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 12 bordars with 7 ploughs. There are 4 serfs, and 3 mills worth 37 shillings and 6 pence. T.R.E. it was, and is now, worth 14 pounds. When received, it was worth 12 pounds.

### IN OVERETUN<sup>3</sup> HUNDRET

The same abbey holds LAVROCHESTOCHÉ [Laverstoke]. Ulveva Beteslau held it, of the abbey, till her death. Afterwards, king William restored this manor to the same abbey (*ecclesiæ*) for (the repose of) his own soul and that of his wife. T.R.E. it was assessed at 10 hides; it is now assessed at 6 hides and half a virgate. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 7 villeins and 19 bordars with 5 ploughs. There are a church, and 3 serfs, and 2 mills worth 14 shillings, and 3 acres of meadow. T.R.E. it was worth 7 pounds, and afterwards was, and is now, worth 8 pounds.

## THE LAND OF THE ABBEY (ÆC-CLESIAE) OF GLOWCESTRE

### IN ESSEBORNE<sup>4</sup> HUNDRET

VII. THE ABBEY OF ST. PETER, of Gloucestre [Gloucester] holds LINCHEHOU [Linkenholt], Ernulf' de Hesdinc gave it to the abbey (*ecclesiæ*), by permission (*concessione*) of king William.<sup>5</sup> Edric held it of king Edward.

It was then assessed at 5 hides; now at 1 hide. The others are in demesne. There is land for 5 ploughs. In (the) demesne are 2 ploughs, and (there are) 4 villeins and 8 bordars with 2 ploughs. There are 6 serfs, and 7 acres of meadow. There is wood(land) for the fences. T.R.E. it was worth 100 shillings, and was afterwards, as now, worth 4 pounds.

fo. 43b.

## THE LAND OF ST. PETER OF WESTMINSTER

### IN HOLESETE<sup>6</sup> HUNDRET

VIII. THE ABBEY OF ST. PETER of Westminster holds EVRESLEI [Eversley]. Four freemen held it, as 4 manors, of king Edward, as an alod (*in alodium*). It was then assessed at 5 hides; now at 4 hides. There is land for . . . There are 10 villeins and 4 bordars with 3 ploughs, and 2 mills worth 105 pence. There is wood(land) worth 30 shillings, and a haw (*haga*) in Winestre [Winchester] worth 7 pence, and 12 acres of meadow. T.R.E. it was worth 100 shillings, and afterwards 4 pounds 10 shillings; it is now worth 4 pounds.

## THE LAND OF THE ABBEY (ÆC-CLESIAE) OF CERTESYG

### IN HEFEDELE HUNDRET<sup>7</sup>

IX. THE ABBEY OF CERTESYG [Chertsey] holds WINESFLET [Winchfield], and Walter Fitz Other<sup>8</sup> holds it of the abbey. Alwin held it of king Edward as an alod (*in alodium*), and it never (formerly) belonged to the abbey. It was then, and is now, assessed at 5 hides. There is land for 8 ploughs. There are 10 villeins and 7 bordars with 1½ ploughs. T.R.E. it was worth 100 shillings, and afterwards 60 shillings; now 30 shillings.

Hugh de Port holds ELVETEHAM [Elvet-ham] of the abbey of Certesy [Chertsey]. Edric held it of king Edward as an alod (*in alodium*). It was then assessed at 3 hides; now at 1 hide.<sup>9</sup> In (the) demesne is 1 plough;

Abbey (Rolls Series) Ernulf gave the manor at Salisbury 2 Feb. '1081' with king William's consent.

<sup>6</sup> Holdshott.

<sup>7</sup> In Odiham Hundred.

<sup>8</sup> See No. XLVI. below.

<sup>9</sup> A blank here in the MS. for insertion of the ploughlands.

<sup>1</sup> See, for this church manor, Mr. Shore's paper on 'Kingsclere and its tythings' in the transactions of the Hampshire field club.

<sup>2</sup> Andover.

<sup>3</sup> Overton.

<sup>4</sup> Pastrow.

<sup>5</sup> According to the cartulary of Gloucester



## THE HOLDERS OF LANDS

and (there are) 4 villeins, and 4 bordars, and 8 serfs, with 2 ploughs; and 4 acres of meadow. There is wood(land) worth 10 swine. T.R.E. it was, as now, worth 30 shillings. When received, it was worth 25 shillings.

### THE LAND OF ST. PETER OF JUMIÈGES (GEMETICENSIS)

IN ROSEBERG<sup>1</sup> HUNDRET

X. THE ABBEY of Jumièges [Gemeticensis] holds HELINGEY [Hayling Island]. Ulward White (*albus*) held it of queen Eddid as an alod (*in alodium*). It then paid geld for 12 hides; now for 7 hides. There is land for 14 ploughs. In (the) demesne are 2 ploughs; and (there are) 23 villeins and 37 bordars with 17 ploughs. There are 3 serfs, and a saltpan worth 6 shillings and 8 pence, and 2 fisheries worth 20 pence, and 1 acre of meadow. There is wood(land) worth 20 swine (from the) pannage. T.R.E. it was worth 15 pounds, and afterwards 10 pounds. It is now worth 12 pounds, but it pays a rent (*de firma*) of 15 pounds.

The monks of the bishopric of Winchester<sup>2</sup> claim this manor, because queen Imma<sup>3</sup> gave it to the church of St. Peter and St. Swithun, and at that time gave the monks seisin (*saisiuit*) of one half; the other half she demised to Ulward for his life only, on condition that, on his death, the monks should have his body for burial and the manor (also). And on these terms (*ita*) Ulward held (his) part of the manor of the monks, till he died, in the time of king William. This is attested by Elsi,<sup>4</sup> abbot of Ramesy [Ramsey], and by the whole Hundred.

### THE LAND OF THE ABBEY (ÆC-CLESIAE) OF GLASTINGBER[IE]

IN RODBRIGE<sup>5</sup> HUNDRET

XI. THE ABBEY of Glastingberie [Glastonbury] holds 1 hide in HORE [Ower in Eling]; and Gislebert de Breteville holds it, of the abbey. Elsi held it of the Abbot, and could not betake himself (*ire*) where he would; but always

paid rent (*gablum*) to the abbot. There is land for two ploughs. In (the) demesne is half a plough, with 6 bordars. There is wood(land) worth 5 swine. It was, and is now, worth 20 shillings.

### THE LAND OF THE ABBEY (ÆC-CLESIAE) OF MIDDeltUNE

IN EGHEIETE HUNDRET<sup>6</sup>

XII. THE ABBEY of Middeltune [Milton] has 12 acres of land, which are held of the abbey by Edward the sheriff (of Wiltshire).<sup>7</sup> It never paid geld. There is 1 villein with 2 oxen, and 1 acre of meadow. There was a fishery, but now there is none. It is worth 40 pence.

### THE LAND OF THE ABBEY (ÆC-CLESIAE) OF GREISTAIN

IN ANDOVRE HUNDRET

XIII. THE ABBEY of Greistan [Grestain]<sup>8</sup> holds PENITONE [Penton Grafton]<sup>9</sup> of the King. Queen Eddid held it as a manor. It then paid geld for 3 hides; now for nothing. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 27 bordars with 3 ploughs. There are a church, and 5 serfs. T.R.E., and afterwards, it was worth 10 pounds. It is now (worth) 8 pounds.

### THE LAND OF ST. MARY OF WINCHESTER<sup>10</sup>

IN MENESTOCH<sup>11</sup> HUNDRET

XIV. THE ABBESS of Winchester holds LIS [Lyss]. It was always the abbey's (*in abbatia*). T.R.E. it was assessed at 5 hides; now at 3 hides. There is land for 4 ploughs. There are 16 villeins with 3½ ploughs, and a mill worth 16 pence, and 1½ acres of meadow. There is wood(land) worth 15 swine. T.R.E., and afterwards, it was, as now, worth 50 shillings; but it pays 4 pounds rent (*de firma*).

<sup>1</sup> Bosmere.

<sup>2</sup> The Old Minster.

<sup>3</sup> Wife of Æthelred and of Canute.

<sup>4</sup> Originally a monk of the New Minster, then abbot of St. Augustine's, Canterbury.

<sup>5</sup> Redbridge.

<sup>6</sup> Part of Christchurch Hundred.

<sup>7</sup> Edward of Salisbury (No. XXVII.).

<sup>8</sup> At the mouth of the Seine.

<sup>9</sup> Alias Weyhill.

<sup>10</sup> Winchester Nunnery.

<sup>11</sup> Meonstoke.

# A HISTORY OF HAMPSHIRE

## IN NETEHAM<sup>1</sup> HUNDRET

The same abbey holds FROLI [Froyle]. It was always so held (*ibi fuit*). T.R.E. it was assessed at 10 hides; now at 8 hides. There is land for 10 ploughs. In (the) demesne are 3 ploughs; and (there are) 15 villeins and 23 bordars with 8 ploughs. There are a church, and 10 serfs, and 2 mills worth 22 shillings and 6 pence, and 8 acres of meadow. T.R.E., and afterwards, it was worth 12 pounds. It is now (worth) 15 pounds; but it pays 20 pounds rent (*de firma*).

## IN SUMBURNE<sup>2</sup> HUNDRET

The same abbey holds LECFORD [Leckford Abbess]. It was always the abbey's (*in ecclesia*). T.R.E. it was assessed at 5 hides; now at 1 hide. There is land for 3 ploughs; in (the) demesne are 2 ploughs; and (there are) 5 villeins and 2 bordars with 2 ploughs. There are 3 serfs, and 15 acres of meadow. T.R.E. it was worth 3 pounds; it was afterwards, and is now, worth 4 pounds.

The same abbey holds STOCHES [Longstock]; and always held it. T.R.E. it was assessed at 3 hides; now at half a hide. There is land for 2 ploughs. In (the) demesne is 1 plough, with 4 bordars and 1 serf. And (there are) a mill worth 20 shillings, and 5 acres of meadow. T.R.E. it was worth 30 shillings. It was afterwards, and is now, worth 40 shillings.

The same abbey holds TIMBEREBERIE [Timsbury], and always held it. T.R.E. it was, as now, assessed at 2 hides. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 4 bordars with 3 ploughs. There are a mill worth 12 shillings and 6 pence, and 50 acres of meadow. T.R.E. it was worth 50 shillings, and was afterwards, and is now, worth 60 shillings.

## IN MANTESBERG<sup>3</sup> HUNDRET

The same abbey holds EBINTUNE [Ovington]. It was, and is, the abbey's (*de ecclesia*). Archbishop Stigand held it. It was then assessed at 1½ hides; now at nothing, because it is for the support (*de victu*) of the nuns. There is land for half a plough. In (the) demesne is 1 plough; and (there are) 3 serfs,

with 1 bordar; and half a mill worth 7 shillings, and 7 acres of meadow. T.R.E., and afterwards, as now, it was worth 25 shillings.

## THE LAND OF THE ABBEY (ÆCCLESIAE) OF ROMESYG

XV. THE ABBEY of Romesy [Romsey] holds the whole vill, in which the abbey (*æcclesia*) itself stands. T.R.E. it was assessed at 14 hides; now at 10 hides. There is land for 18 ploughs. In (the) demesne are 2 ploughs; and (there are) 39 villeins and 53 bordars with 16 ploughs. There are 2 serfs, and 3 mills worth 25 shillings, and 536 acres<sup>4</sup> of meadow. There is wood(land) worth 40 swine.

There are 14 burgesses in Winchester (*Wintonia*) who pay 25 shillings. Of this land, Hunger holds 1 hide and 1 virgate; and 4 other freemen hold 2 hides less half a virgate. There are in (the) demesne 4 ploughs, and 13 bordars, and 2 serfs. The whole (vill), T.R.E. and afterwards, was worth 19 pounds. Now what the Abbess holds (is worth) 24 pounds. What the tenants (hold is worth) 40 shillings.

The same abbey holds, and held, 1 hide, where are 4 villeins with 1 plough; and a mill worth 10 shillings. It was, and is now, worth 20 shillings.

## IN MANTESBERG<sup>5</sup> HUNDRET

fo. 44.

The same abbey holds STOCHE [Itchen Stoke], and always held it. T.R.E. it was assessed at 8 hides; it is now assessed at 6 hides. There is land for 6 ploughs. In (the) demesne are 3 ploughs; and (there are) 8 villeins and 8 bordars with 7 ploughs. There are 2 serfs, and a mill and a half worth 22 shillings and 6 pence; and 10 acres of meadow. T.R.E., and afterwards, it was worth 7 pounds; (it is) now (worth) 9 pounds.

## IN CLERE<sup>6</sup> HUNDRET

The same abbey holds SIDEMANESTONE [Sidmonton], and always held it. T.R.E. it was assessed at 10 hides; it is now assessed at 7½ hides. There is land for 11 ploughs. In (the) demesne are 2 ploughs; and (there

<sup>1</sup> Alton and Selbourne.

<sup>2</sup> King's Sombourne.

<sup>3</sup> Bountisborough.

<sup>4</sup> 'quingentæ' added by interlineation.

<sup>5</sup> Bountisborough.

<sup>6</sup> Kingsclere.



## THE HOLDERS OF LANDS

are) 17 villeins and 11 bordars with 9 ploughs. There are 1 serf, and 4 acres of meadow. There is wood(land) worth 5 swine from the pannage. T.R.E. it was worth 7 pounds, and afterwards 8 pounds. (It is) now (worth) 10 pounds.

### IN RODERIDGE<sup>1</sup> HUNDRET

The same abbey holds, and held, 1 hide in DODINTUNE [Totton?],<sup>2</sup> which was assessed at 1 hide. There is land for 3 ploughs. There are 8 villeins and 7 bordars with 3 ploughs; and a mill worth 10 shillings, and a saltpan worth 10 shillings, and 30 acres of meadow. It was, and is now, worth 70 shillings.

### IN BOVERE HUNDRET<sup>3</sup>

The same abbey holds, and always held, 1 hide in SUEIA [Sway]. T.R.E. it was assessed at 1 hide; now at 3 virgates; 1 virgate being in the forest. There is land for 1 plough. There are 2 villeins with two ploughs, and 1 acre of meadow. It was, and is now, worth 20 shillings.

## THE LAND OF THE ABBEY (ÆC-CLESIAE) OF WARWELLE

### IN WELFORD HUNDRET

XVI. THE ABBEY OF WARWELLE [Wherwell] holds the whole vill in which the abbey [*ecclesia*] itself stands, and always held it. T.R.E. it was assessed at 22 hides; now at 13 hides. There is land for 14 ploughs. In (the) demesne are 4 ploughs; and (there are) 5 villeins, and 12 bordars, and 25 coliberts, and 10 serfs with 10 ploughs. There are 3 mills worth 27 shillings and 6 pence; and 65 acres of meadow. There is wood(land) worth 25 swine. T.R.E., and afterwards, it was worth 10 pounds. (It is) now (worth) 15 pounds.

The same abbey holds TOCHITON [Tufton], and always held it. T.R.E. it was assessed at 7 hides; it is now assessed at 3½ hides. There is land . . . In (the) demesne are 2 ploughs; and (there are) 9

villeins and 6 bordars with 1½ ploughs. There are 4 serfs, and 2 mills worth 35 shillings; and 8 acres of meadow; and wood(land) for the fences. It was, and is now, worth 6 pounds.

The same abbey holds GODORDE [Goodworth],<sup>4</sup> and always held it. T.R.E. it was assessed at 3 hides; now half a hide. There is land for 3 ploughs. In (the) demesne are 2 (ploughs) with 6 bordars, and 4 serfs, and 1 plough<sup>5</sup> and 10 acres of meadow. It was, and is now, worth 40 shillings.

The same abbey holds ANNA [Little Anne],<sup>6</sup> and always held it. T.R.E. it was assessed at 5 hides; now at 3½ virgates. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 10 bordars and 4 serfs with half a plough; and 2 mills worth 30 shillings, and 2 acres of meadow. There is wood(land) for the fences. It was, and is now, worth 100 shillings.

The same abbey holds MIDDELTUNE [Middleton],<sup>7</sup> and always held it. T.R.E. it was assessed at 20 hides; now at 10 hides. There is land for 9 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 10 bordars with 7 ploughs. There are 5 serfs and 2 mills worth 40 shillings, and a fishery for the use of the hall, and 9 acres of meadow. It was, and is now, worth 12 pounds.

The same abbey holds BOLENDE [Bullington], and always held it as (*pro*) 10 hides; (but) it never paid geld. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 8 villeins and 4 bordars and 3 serfs, and a mill worth 15 shillings. It was, and is now, worth 7 pounds.

The same abbey holds, in the city of Winchester (*Wintonia*), 31 messuages (*masuram*), which are free from all customary dues, the king's geld excepted; of which geld, also, the abbess's own house is free. T.R.E. (this) was worth 50 shillings; it is now worth 30 shillings. Here also, that is in Wincestre [Winchester], the abbey has 1 mill which pays 48 shillings.

<sup>1</sup> Redbridge.

<sup>2</sup> Probably Totton in Eling, formerly Tottington (the 'Totintone' of Domesday).

<sup>3</sup> The New Forest Hundred.

<sup>4</sup> In Goodworth Clatford.

<sup>5</sup> *Sic.* But the one plough should probably be connected with the bordars and serfs.

<sup>6</sup> In Abbot's Anne.

<sup>7</sup> In Longparish.

# A HISTORY OF HAMPSHIRE

## THE LAND OF THE CANONS OF THUINAM

### IN EGHEIETE HUNDRET<sup>1</sup>

THE CANONS OF THE HOLY TRINITY OF THUINAM [Twynham]<sup>2</sup> hold, in that vill, 5 hides and 1 virgate; and 1 hide in the Isle of Wight (*Wit insula*). These hides always belonged to (*fuere in*) that church. They were then<sup>3</sup> assessed at 6 hides and 1 virgate; and now . . . In (the) demesne are 5 ploughs; and (there are) 11 villeins and 13 bordars with 1 plough. There are 2 serfs, and a mill worth 30 pence, and 108 acres of meadow. There is wood(land) worth 5 swine. In the borough are 6 messuages (*masuræ*) worth 13 shillings and 4 pence.

To this church belongs the whole tithe of Thuinam [Twynham], and the third part of the tithes of HOLEHEST [Holdenhurst].

T.R.E. it was worth 6 pounds. It is now worth 8 pounds.

Alnod the priest holds, of the King, BORTEL [ ]; he held it in parage (*in paragio*) of king Edward. It was then assessed at 1½ virgates; now the same. There is land for half a plough which is there with 2 serfs; also the third part of a mill worth 25 pence; and 10½ acres of meadow; and 2 messuages (*masuræ*) in Tuinam [Twynham]. It was worth 5 shillings; it is now worth 10 shillings.

Alsì the priest holds BAILOCHESLEI [Bashley in Milton] of the King; he himself held it of king Edward. It was then assessed at 1 hide and 3 virgates; now at 3 virgates only. There is land for 1 plough, which is in (the) demesne with 2 serfs and 1 villein, and 1 bordar, and half a mill worth 3 shillings; and 16 acres of meadow. It was, and is now, worth 20 shillings.

In Bovere<sup>4</sup> Hundret, the church of THE HOLY TRINITY of Thuinam [Twynham] (had) 8 acres of land in Andret [ ], (but) this land is now in the forest.

## THE LAND OF COUNT ALAN

### IN TICEFELLE<sup>5</sup> HUNDRET

XVIII. COUNT ALAN holds CROFTGNE

<sup>1</sup> Part of Christchurch Hundred.

<sup>2</sup> Now Christchurch.

<sup>3</sup> A marginal note defines this as 'T.R.E.'

<sup>4</sup> The New Forest Hundred.

<sup>5</sup> Titchfield.

[Crofton]. Ulward held it; and could betake himself (*ire*) where he would with this land. T.R.E. it was assessed at 7 hides; now at 3 hides less half a virgate. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 11 villeins and 2 bordars, with 4½ ploughs. There are a church and 4 serfs, and a mill worth 12 shillings and 6 pence; and a fishery, together with 2 saltpans worth 100 pence; and 24 acres of meadow. There is wood(land) worth 5 swine. T.R.E. it was worth 8 pounds, and afterwards 100 shillings; (it is) now (worth) 4 pounds.

The same Count holds FUNTELEI [Funtley], Ulward held it of earl Godwin, and could not betake himself (*ire*) where he would. It was then, as now, assessed at 1 hide. There is land for 3 ploughs. There are 7 villeins and 2 serfs with 2½ ploughs; and a mill worth 10 shillings and 3 acres of meadow. T.R.E., and afterwards, it was worth 40 shillings; (it is) now (worth) 30 shillings. Eldred and the men of the Hundred testify that this manor does not belong to Croftune [Crofton].

The same Count holds 1 manor, which Angot and Elmer his brother held of king Edward. It was then assessed at 5 hides; it is now assessed at 1 hide. There is land for 3 ploughs. There are 2 villeins and 4 bordars with 1 plough, and 3 serfs and 2 acres of meadow. There is wood(land) worth 5 swine. T.R.E. it was worth 4 pounds; it was afterwards, and is now, worth 40 shillings. These (lands) the Count received as 1 manor.

fo 44b.

## THE LAND OF THE COUNT OF MORTAIN<sup>6</sup>

### IN SUMBURNE<sup>7</sup> HUNDRET

XIX. THE COUNT of Mortain holds 1 manor, of the King, which 3 thegns held of king Edward; (they were) Lewin, Godric, and Saulf. It was then assessed at 4 hides; now at nothing. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 20 bordars with 1 plough; and 4 serfs; and a mill worth 15 shillings; and 30 acres of meadow. It is worth 8 pounds. T.R.E. it was worth 10 pounds, and afterwards 11 pounds; it now pays 12 pounds.

<sup>6</sup> Robert, half-brother of the Conqueror.

<sup>7</sup> King's Sombourne.



# THE HOLDERS OF LANDS

## THE LAND OF COUNT EUSTACE<sup>1</sup>

### IN ESSELEI<sup>2</sup> HUNDRET

XX. COUNT EUSTACE holds SUDTONE [Bishop's Sutton]<sup>3</sup> of the King. Earl Harold held it. There are 25 hides. It is now assessed at 10 hides; and it was the same (*sic fecit*) T.R.E., says the Hundred (court). There is land for 50 ploughs. In (the) demesne are 5 ploughs; and (there are) 60 villeins and 60 bordars with 23 ploughs. There is a church with 1 hide; and (there are) 32 serfs, and 4 mills worth 35 shillings, and 6 acres of meadow. There is wood(land) worth 100 swine from the pannage. T.R.E. it was worth 50 pounds; (it was) afterwards and (is) now (worth) 60 pounds; yet it pays 80 pounds by tale.

### IN NETEHAM<sup>4</sup> HUNDRET

The same Earl holds 5 hides in Hallege [Headley], which were assessed, T.R.E., at 3 hides. Earl Godwine held them, and they are reckoned as part of (*computantur in*) Sudtone [Sutton].

## THE LAND OF EARL ROGER<sup>5</sup>

### IN PORTESDON<sup>6</sup> HUNDRET

XXI. EARL ROGER holds BORHUNTE [Boarhunt] of the King. Three freemen held it of king Edward as an alod (*in alodium*). It was then assessed at 11½ hides; now at 4 hides and 1½ virgates. There is land for 10 ploughs. In (the) demesne are 2 ploughs; and (there are) 10 villeins and 6 bordars with 3 ploughs. There are 6 serfs, and a church, and a mill worth 42 pence; and another for the use of (*ad*) the hall; and 2 saltpans worth 22 shillings and 4 pence.

One knight holds, of this manor, 1 hide, where he has 1 plough which is worth 10 shillings. The whole manor was worth, T.R.E., 11 pounds; and afterwards 11 pounds. (It is) now (worth) 14 pounds; but it is farmed for (*reddit de firma*) 17 pounds.

<sup>1</sup> Of Boulogne.

<sup>2</sup> Bishop's Sutton.

<sup>3</sup> So called because king Stephen (Count of Boulogne in right of his wife) exchanged it with the bishop of Winchester for the episcopal manor of Morden, Cambridgeshire.

<sup>4</sup> Alton and Selbourne.

<sup>5</sup> Of Shrewsbury.

<sup>6</sup> Portsdown.

Oda of Wincestre claims half a hide of this manor, which he says does not belong to it (*ibi*).

### IN BERMESPLET<sup>7</sup> HUNDRET

Clerks hold CANDOVRE [Preston Candover] of the Earl. Alvrice held it of earl Harold. It then, as now, paid geld for 5½ hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs, and (there are) 9 villeins and 1 bordar with 2½ ploughs. There are 3 serfs, and 5 acres of meadow; and a haw (*haga*) in Wincestre [Winchester] worth 17 pence. T.R.E. it was worth 10 pounds, and afterwards 60 shillings; it is now worth 100 shillings.

### IN ANDOVRE HUNDRET

Turald holds PENITONE [Penton Mewsey] of the Earl. Osmund held it as an alod (*in alodium*) of king Edward as a manor. It then paid geld for 8 hides; now 5 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 11 villeins and 7 bordars with 4 ploughs. There are a church, and 3 serfs, and 5 acres of meadow. There is wood(land) without pannage. T.R.E. it was worth 7 pounds; it was afterwards, and (is) now, (worth) 100 shillings.

### IN SIRLEI<sup>8</sup> HUNDRET

William de Anslevile holds AVERE [Avon<sup>9</sup> on the Avon] of the Earl. Chetel held it as an alod (*in alodium*) of king Edward as a manor. It then, as now, paid geld for 1 hide. There is land for 1 plough, which is in (the) demesne, with 2 bordars and 13 acres of meadow. All the woodland (*nemus*) of this manor is in the King's forest. T.R.E. it was worth 25 shillings; it was afterwards, and is now, worth 15 shillings.

### IN SUMBURNE<sup>10</sup> HUNDRET

Turald holds HOLSTUNE [North Houghton] of the Earl. Osmund held it of king Edward. It was then, and is now, assessed at 2½ hides. There is land for 1½ ploughs. In (the) demesne is 1 plough with 4 bordars and 4 serfs. It was, and is now, worth 30 shillings.

<sup>7</sup> Bermondspitt.

<sup>8</sup> Shurley, near Ripley.

<sup>9</sup> Mr. Moody identifies this manor as Iford in Christchurch. See note on p. 484, 485 below for my reasons for above identification.

<sup>10</sup> King's Sombourne.

# A HISTORY OF HAMPSHIRE

## IN CEPTUNE<sup>1</sup> HUNDRET

The same Earl holds CEPTUNE [Chalton]<sup>2</sup> in demesne. Earl Godwin held it. It was then assessed at 60 hides; it is now assessed at 27 hides. There is land for 35 ploughs. In (the) demesne are 10 ploughs; and (there are) 55 villeins and 27 bordars with 27 ploughs. There are churches (*æcclesiæ*), and 22 serfs, and 1 acre of meadow. There is wood(land) worth 50 swine. The pasture produces 10 shillings. T.R.E. it was worth 56 pounds, and afterwards 35 pounds. (It is) now (worth) 80 pounds, but it pays 110 pounds and 1 mark of gold.

Walter holds SENEORDE [Sunworth]<sup>3</sup> of the same Earl. Tunbi held it of earl Godwine. It was then, as now, assessed at 3 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 villeins and 6 bordars with 2 ploughs. There is a chapel (*æcclesiola*), and 1 serf, and 1 acre of meadow. There is wood(land) worth 4 swine, the greatest part of which has been blown down (*vento corruit*).

The men of the Hundred say that Seneorde [Sunworth] was not (*non jacuit*) in the Earl's manor of Ceptune [Chalton], and that earl William,<sup>4</sup> who gave him Ceptune [Chalton] did not grant him Seneorde [Sunworth].<sup>5</sup>

T.R.E. it was, and is now, worth 4 pounds. When received, it was worth 3 pounds; but it pays 100 shillings.

## IN BOSEBERG<sup>6</sup> HUNDRET

The abbey of Troarz [Troarn] holds 5 hides<sup>7</sup> of the same Earl. Alward held them, as a manor, of king Edward as an alod (*in alodium*). It then paid geld for 5 hides; now for 3 hides. There is land for 3 ploughs. There are 11 villeins with 4 ploughs, and 1 acre of meadow. There is wood(land) for the fences. T.R.E. it was worth, as now, 4 pounds. When received, it was worth 3 pounds; but it pays 100 shillings.

Sired holds NEUTIBRIGE [Nytimber]<sup>8</sup> of

<sup>1</sup> Finchdean.

<sup>2</sup> Comprising Chalton, Clanfield, Idsworth, Catherington and Blendworth.

<sup>3</sup> In Buriton. <sup>4</sup> Of Hereford.

<sup>5</sup> This paragraph is added, lower down in the column, after the 'Neutibrige' entry.

<sup>6</sup> Bosmere.

<sup>7</sup> In Hayling Island. This is proved by my *Calendar of Documents preserved in France*, Nos. 470, 480.

<sup>8</sup> In Warblington. (Not identified by Mr. Moody).

the same Earl. He himself held it of earl Harold. It was then, as now, assessed at 3 hides. There is land for 2 ploughs. In (the) demesne are 2 oxen in a plough (team), and 2 (?villeins) and 4 bordars with half a plough; and a mill worth 5 shillings, and 3 acres of meadow, and a fishery. It was, and is now, worth 30 shillings.

## IN MENESTOCH<sup>9</sup> HUNDRET

Edward holds 1 hide in HAMLEDUNE [Hambleton]. He himself held it of earl Godwine, and could not betake himself anywhere without his leave (*licentia*). But it was not (*non jacuit*) then, as it is now, part of Ceptune [Chalton]. It was then, as now, assessed at 1 hide. There is 1 plough in (the) demesne with 2 bordars. There is wood(land) worth 6 swine. It was, and is now, worth 20 shillings.

## LAND OF EARL HUGH<sup>10</sup>

### IN FORDINGEBRIGE HUNDRET

XXII. Earl Hugh holds BICHETONE [Bickton]<sup>11</sup> of the King; and Hugh Maci<sup>12</sup> (holds it) of him. Chetel held it of king Edward as an alod (*in alodium*). It then paid geld for 4 hides and half a virgate; now for 2 hides and half a virgate. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 10 bordars with 3 ploughs. There are 4 serfs, and a mill worth 7 shillings and 6 pence, and 30 acres of meadow. There is wood(land) worth 4 swine. The pasture of this manor, and some part of the wood(land), is in the King's forest. T.R.E., and afterwards, it was worth 100 shillings; it is now worth 60 shillings.

## THE LAND OF HUGH DE PORTH<sup>13</sup>

### IN FORDINGEBRIGE HUNDRET

XXIII. HUGH de Port holds CERDEFORD [Chardford],<sup>14</sup> and William<sup>15</sup> (holds it) of

<sup>9</sup> Meonstoke.

<sup>10</sup> Of Chester.

<sup>11</sup> In Fordingbridge. Mr. Moody identified it as Bighton.

<sup>12</sup> It seems probable, as Hugh 'Maci' was a tenant of the earl of Chester, that he was a member of the house which gave name to Dunham Massey in Cheshire. But, if so, a 'de' is omitted before Maci.

<sup>13</sup> See Introduction as to the heading of this fief. <sup>14</sup> In Breamore.

<sup>15</sup> William de Chernet.



## THE HOLDERS OF LANDS

him; 2 freemen held it, as 2 manors, of king Edward as an alod (*in alodium*). It then, as now, paid geld for 5 hides. There is land for 4 ploughs; in (the) demesne are 2 ploughs; and (there are) 20 bordars and 4 serfs with 1 plough, and 91 acres of meadow. T.R.E., as now, (it was) worth 4 pounds. When received, (it was worth) 100 shillings.

The same William holds of Hugh in CLATINGES [ ] 1½ virgates. Two freemen held it of Alwin, but not as an alod (*alodium*). There are 2 bordars and 6 acres of meadow. It was worth 10 shillings. (It is) now (worth) 8 shillings.

In this Hundred, and in this same manor, Picot holds 2½ virgates of the King. Phitelet held it, as a manor, of king Edward as an alod (*in alodium*). It was then, as now, assessed at 2½ virgates. There is land for half a plough, which is there, with 1 villein and 2 bordars, and 10 acres of meadow.

Willelmus de Chernet<sup>1</sup> claims this land, and says that it belongs to the manor of CERDEFORD [Chardford], (part of) Hugh de Port's fief (*feudum*), which he inherits from his predecessor (*per hereditatem sui antecessoris*); and he has brought (as) his testimony to this (the witness) of the better (men) and of the old men of the whole county and (of the) Hundred; and Picot has brought against it (*contraduxit*) as his testimony (the witness) of villeins and of common people (*de vili plebe*) and of bailiffs, who are willing to maintain (*defendere*) by oath, or by the judgment of God (*i.e.* ordeal), that he who held (this) land was a free man, and could betake himself (*ire*) with his land where he would. But the witnesses of William refuse to accept (any) law except that of king Edward until (the point) be determined (*diffiniatur*) by the king. It was worth 15 shillings, and afterwards 8 shillings; it is now worth 10 shillings.

fo. 45.

### IN BASINGESTOCH HUNDRET

XXIII.<sup>2</sup> HUGH de Port holds SIREBURNE [Sherborne St. John] of the King. Ulveva held it of king Edward, and could betake herself (*ire*) where she would. It was then assessed at 10 hides; now at 7 hides. There

is land for 10 ploughs. In (the) demesne are 3 ploughs; and (there are) 16 villeins and 19 bordars with 5 ploughs. There is a church with half a hide, which pays 20 shillings; and (there are) 5 serfs, and 3 mills worth 27 shillings and 6 pence; and 20 acres of meadow. T.R.E., and afterwards, it was worth 10 pounds; (it is) now (worth) 15 pounds.

The same Hugh holds BRUMELAI [Bramley]. Alvrice held it of king Edward, and could betake himself (*ire*) where he pleased. It was then assessed at 5 hides; now at 2½ hides. There is land for 8 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 14 bordars with 11 ploughs. There are a church, and 8 serfs, and 2 mills worth 20 shillings, and 2 acres of meadow. There is wood(land) worth 80 swine, and (there are) 3 burgesses,<sup>3</sup> who pay 22 pence. T.R.E. it was worth 100 shillings; and afterwards 7 pounds; (it is) now (worth) 9 pounds, but it pays 12 pounds.

The same Hugh holds BASINGES [Basing]. Altei held it of king Edward, and could betake himself (*ire*) where he would. It was then assessed at 11 hides; now at 6½ hides. There is land for 10 ploughs. In (the) demesne are 3 ploughs; and (there are) 20 villeins and 41 bordars with 11 ploughs. There are 7 serfs, and 3 mills worth 50 shillings, and 19 acres of meadow. (There is) wood(land) worth 25 swine. T.R.E. it was worth 12 pounds, and afterwards 8 pounds; (it is) now worth 16 pounds.

The same Hugh holds TUNEWORDE [Tunworth]. Alvred held it of queen Eddid, and could not betake himself (*ire*) anywhere. It was then assessed at 3 hides; now at 2 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 6 villeins and 10 bordars with 2½ ploughs. There are 4 serfs, and 5 acres of meadow. T.R.E. it was worth 3 pounds, and afterwards 50 shillings; (it is) now (worth) 4 pounds.

The same Hugh holds NATALIE [Nately], and Anschitil (holds it) of him. Edwin held it of king Edward, and could betake himself (*ire*) where he pleased. It was then, as now, assessed at 2½ hides. There is land for 4 ploughs. In (the) demesne are 1½ ploughs; and (there are) 5 villeins and 4 bordars with

<sup>1</sup> Represented in 1166 by Hugh de Chernet, who held 3 fees of Hugh de Port's heir. He was probably the William who held of Hugh Fitz Grip's widow in Wimborne and elsewhere in Dorset (fo. 83).

<sup>2</sup> See Introduction as to commencement of this fief.

<sup>3</sup> A blank after 'burgesses' in MS., as if for insertion of their borough.

## A HISTORY OF HAMPSHIRE

2 ploughs. There are 11 serfs, and a mill worth 10 shillings, and 5 acres of meadow. T.R.E. it was worth 50 shillings, and afterwards 30 shillings; (it is) now (worth) 60 shillings.

The same Hugh holds CAMPESETE [Kempshott in Winslade]; and Walter (holds it) of him. Aldret held it T.R.E., and could betake himself (*ire*) where he would. It was then, as now, assessed at 2 hides. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 3 villeins and 3 bordars with 1 plough. It was always worth 30 shillings.

The same Hugh holds CHINEHAM [Chineham in Monk Sherborne]; and Aghemund (holds it) of him. He himself held it of king Edward, and could betake himself (*ire*) where he pleased. It was then, as now, assessed at 3 hides. There is land for 2 ploughs. In the demesne is 1 plough; and (there are) 3 villeins and 4 bordars with 2 ploughs. There are 7 serfs, and 2 acres of meadow. It was always worth 50 shillings.

The same Hugh holds WINESFLOT [Winslade];<sup>1</sup> and Walter (holds it) of him. T.R.E. (it was), and is now, assessed at 1 hide. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 8 bordars with 4 ploughs. There are 4 serfs. It was always worth 40 shillings.

### IN TICEFELLE<sup>2</sup> HUNDRET

The same Hugh holds WICHEHAM [Wickham]. Four brothers held it, as 2 manors, of king Edward. It was then, as now, assessed at 12 hides. Hugh received it as 1 manor. There is land for 7 ploughs. In (the) demesne are 2 ploughs; and (there are) 15 villeins and 6 bordars with 7 ploughs. There are 5 serfs, and 2 mills worth 20 shillings, and 8 acres of meadow. There is wood(land) worth 5 swine. T.R.E. it was worth 10 pounds, and afterwards 4 pounds; it is now worth 7 pounds.

The same Hugh holds SUGION [Sigeons-

<sup>1</sup> It may seem improbable that 'Winesflet' (p. 472 above) should be Winchfield, and yet 'Winesflet' be Winslade; but this identification is confirmed by the *Nomina Villarum* (1316), which enters the latter place as 'Wynesflode' (in Basingstoke Hundred).

<sup>2</sup> Titchfield.

worth in Titchfield]; and Herlebald (holds it) of him. Ulvric held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 2 bordars with 2 ploughs. There are 3 serfs, and a mill worth 20 shillings, and 5 acres of meadow. There is wood(land) worth 5 swine. T.R.E. it was, as now, worth 60 shillings. When received, it was worth 30 shillings.

The same Hugh holds HOUGH [Hook in Titchfield]; and German (holds it) of him. Norman held it of king Edward. It was then, and is now, assessed at 1 hide. There is land for 1½ ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 3 bordars with 1 plough. There are 3 serfs, and 1 acre of meadow. There is wood(land) worth 1 pig. It is worth 25 shillings.

The same Hugh holds STUBITONE [Stubington].<sup>3</sup> Godwine held it of king Edward. It was then, as now, assessed at 3 hides. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 4 bordars with 2 ploughs; and 2 acres of meadow. T.R.E. it was worth 50 shillings; and afterwards it was, as now, (worth) 60 shillings; but it pays 110 shillings.

### IN SUMBURNE<sup>4</sup> HUNDRET

The same Hugh holds HOLSTUNE [Houghton]; and Heldered (holds it) of him. Godwine held it of king Edward. It was then, as now, assessed at 2½ hides. The same Godwine held ABEDRIC [Awbridge in Michaelmarsh] as 1 manor. It was then, as now, assessed at 1½ hides. These 2 manors Hugh received as 1 manor. There is land for 4 ploughs. In (the) demesne are 1½ ploughs; and (there are) 4 villeins with 3 ploughs, and 23 serfs, and 18 acres of meadow. The whole, T.R.E. and afterwards, was worth, as now, 4 pounds. The said Hugh claims, for the use of this manor, 3 messuages (*masuras*) and the corner of a meadow, and 1 virgate and 5 acres of land, against (*super*) Turstin the chamberlain. Concerning this the whole Hundred bears testimony that his predecessors (*antecessores*) were seized thereof, and in possession (*tenentes*) on the day on which king Edward was alive and dead.

<sup>3</sup> In Crofton.

<sup>4</sup> King's Sombourne.



# THE HOLDERS OF LANDS

## IN MENESTOCH<sup>1</sup> HUNDRET

The same Hugh holds WESBERIE [Westbury];<sup>2</sup> and Gozelin (holds it) of him. Ulnod held it of king Edward. It was then, and is now, assessed at 3 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 6 bordars with 2 ploughs. There are 2 serfs, and 3 acres of meadow. There is wood(land) worth 4 swine. T.R.E., as now, it was worth 4 pounds. When received, (it was worth) 40 shillings.

The same Hugh holds WARNEFORD [Warnford]. Ulvric and Olward held it, in parage (*in paragio*), of king Edward, and had 2 halls. It was then assessed at 4 hides; now at 2 hides less 1 virgate.

There are 3 hides and 4 acres of land in HUNE [Hound], which belonged to Warnford [Warnford], and paid (their) geld in Manebridge Hundred. In all (*inter totum*) there are 7 hides. There is land for 9 ploughs. In (the) demesne are 3 ploughs; and (there are) 31 villeins and 9 bordars with 6 ploughs. There are a church and 6 serfs, and 2 mills worth 20 shillings, and 20 acres of meadow. T.R.E. it was, as now, worth 14 pounds. When received, (it was worth) 8 pounds.

The same Hugh holds QUEDEMENTUNE [Corhampton]. Alwin held it of king Edward. It was then assessed at 3 hides; now at 1 hide. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins and 6 bordars with 1 plough. There are 4 serfs and a church, and 2 mills worth 22 shillings, and 1 acre of meadow; and a house (*domus*) in Winestre (Winchester) worth 5 shillings. T.R.E. it was, as now, worth 8 pounds. When received, (it was worth) 5 shillings.

The same Hugh holds HOU [East Hoe].<sup>3</sup> Ulward held it of king Edward. It was then assessed at 1½ hides; now 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 3 villeins and 2 bordars with 2 ploughs. There are 4 serfs, and 1 acre of meadow. There is wood(land) worth 4 swine. T.R.E. it was worth 40 shillings, afterwards 30 shillings, (and) now 60 shillings, but it is farmed (*est ad firmam*) for 14 pounds.

<sup>1</sup> Meonstoke.

<sup>2</sup> In West Meon and East Meon.

<sup>3</sup> A farm in Soberton.

## IN CLERE<sup>4</sup> HUNDRET

The same Hugh holds WERSTE [Ewhurst]; and Walter (holds it) of him. Godwin held it, and could betake himself (*ire*) where he would. It was then, as now, assessed at 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 2 bordars with 1 plough. There is wood(land) worth 5 swine. It was always worth 30 shillings.

The same Hugh holds 1 hide in CLERE<sup>5</sup> [Clere]; and Faderlin (holds it) of him. Saulf and Godwine held it, in parage (*in paragio*), of king Edward. There were 2 halls, but now there is one only. There is land for 1½ ploughs. In (the) demesne is 1 plough, with 4 bordars and 3 serfs. There are a mill worth 12 shillings, and 2 acres of meadow. It was, and is now, worth 20 shillings.

The same Hugh holds CHENOL [Knowle],<sup>6</sup> and Faderlin (holds it) of him. Alnod held it, in parage (*in paragio*), of king (Edward). It was then, as now, assessed at 3½ virgates. There is land for 1 plough, which is in (the) demesne; and (there are) 1 villein and 10 bordars with half a plough. There are 2 serfs, and 2 acres of meadow. It was always worth 20 shillings.

## IN ESSEBURNE<sup>7</sup> HUNDRET

The same Hugh holds LIVESELLE [Litchfield];<sup>8</sup> and Faderlin (holds it) of him. Ezi

<sup>4</sup> Kingsclere.

<sup>5</sup> This was probably Clerewoodcote, a tything of Kingsclere, for in the *Testa de Nevill*, we find two fees 'of the old feoffment' held of St. John 'in Clere et in Wodecote' by Henry de Wodecote.

<sup>6</sup> Not identified by Mr. Moody. Mr. Shore, in his valuable paper on 'Kingsclere and its Tythings' (Hampshire Field Club, Vol. III. [1898], pp. 183 *et seq.*) holds that this 'Chenol' was probably North Oakley, the Domesday scribe rendering 'Oak' by the French 'Chêne'; but in a St. John Inq. p. m. of 3 Ed. III. (1329-1330) it duly appears as 'Cnoll' among the St. John knight's fees. Moreover, 'Chenol' would be the Domesday equivalent of Knowle in Hampshire as is 'Chenolle' in Somerset, and as is 'Chenep,' in Hampshire itself, for Knapp (in Christchurch).

<sup>7</sup> Pastrow.

<sup>8</sup> Not identified by Mr. Moody. It appears among the St. John fees in the 14th century as 'Ludeshelve' and 'Ledeshelve,' and in the

## A HISTORY OF HAMPSHIRE

held it of king Edward. It was then, as now, assessed at 3 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 10 bordars with 2 ploughs. There is wood(land) for the fences. T.R.E. it was worth 4 pounds; and afterwards and now 3 pounds.

### IN NETEHAM<sup>1</sup> HUNDRET

The same Hugh holds CELTONE [Chawton]. Oda held it of king Edward as an alod (*in alodium*). There were 10 hides, but king Edward assessed it (*misit*) for service and geld at 4 hides and 1 virgate. There is land for 8 ploughs. In (the) demesne are 4 ploughs; and (there are) 19 villeins and 8 bordars with 5 ploughs. There are 6 serfs and 6 acres of meadow. There is wood(land) worth 50 swine. CELTONE [Chawton] was worth, T.R.E., 10 pounds, and afterwards 10 pounds;<sup>2</sup> now it is worth 12 pounds.

The same Hugh holds LIDESSETE [Lidshott in Bramshott]. Alwin held it of king Edward as an alod (*in alodium*). It was then assessed at 2 hides; now at 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 5 bordars with 5 ploughs, and a mill worth 7 shillings and 6 pence, and 4 acres of meadow. There is wood(land) worth 50 swine. T.R.E., and afterwards, it was worth 60 shillings; (it is) now (worth) 100 shillings.

### IN CILLEI<sup>3</sup> HUNDRET

The same Hugh holds ACLEI [Church Oakley]. Alwin held it of king Edward as an alod (*in alodium*). It was then assessed at 10 hides; now at 1½ hides and 1 virgate. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 6 villeins and 6 bordars with 2 ploughs. There are 4 serfs and a church. There is wood(land) for the fences. T.R.E., and afterwards, it was worth 6 pounds; it is now worth 8 pounds.

### IN ODINGETON<sup>4</sup> HUNDRET

The same Hugh holds AOLTONE [Upton

1346 return of fees, it is 'Lydeshelve' in Clere Hundred. This was Litchfield (see also note on p. 471 above).

<sup>1</sup> Alton and Selbourne.

<sup>2</sup> This clause, having been omitted, was entered after the manor which follows.

<sup>3</sup> Chuteley.

<sup>4</sup> Named from Hoddington (House) in Upton Grey. It comprised the three adjoin-

Grey].<sup>5</sup> Azor held it of king Edward as an alod (*in alodium*). It was then assessed at 10 hides; it is now assessed at 3½ hides. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 7 villeins and 9 bordars with 6 ploughs. There are a church and 6 serfs. There is wood(land) for the fences. T.R.E. it was, as now, worth 10 pounds. When received, it was worth 8 pounds.

### IN BERMESPLET<sup>6</sup> HUNDRET

The same Hugh holds HENERT [Herriard]; and Walter (holds it) of Hugh. Erlenc held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 5 hides. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and 8 villeins and 2 bordars with 4 ploughs. There is 1 serf. There is wood(land) for the fences. T.R.E. it was worth 4 pounds, and afterwards 3 pounds; it is now worth 100 shillings.

The same Hugh holds CANDEVRE [Preston Candover]; and Anschitil (holds it) of him. Godwin held it of king Edward. It then, as now, paid geld for 1 hide and 1 virgate of land. There is land for 1 plough, which is in demesne; and (there are) 4 serfs and 2 villeins with half a plough. T.R.E., and afterwards, it was, as now, worth 30 shillings.<sup>7</sup>

The same Hugh holds DUMMERE [Dummer]; and one of his men (holds it) of him. Alric held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 5 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 8 villeins and 9 bordars with 2 ploughs. There are a church and 3 serfs. T.R.E. it was, as now, worth 100 shillings. When received, it was worth 40 shillings.

### IN PORTESDON<sup>8</sup> HUNDRET

The same Hugh holds BOCHELAND [Buckland];<sup>9</sup> and Heldred (holds it) of him. Alward

ing parishes of Upton Grey, Weston, and South Warnborough, forming a compact block.

<sup>5</sup> This is Mr. Moody's identification. But 'Aoltone' suggests a lost name rather than an earlier form of Upton.

<sup>6</sup> Bermondspitt.

<sup>7</sup> This Candover entry is added at the foot of the folio.

<sup>8</sup> Portsdown.

<sup>9</sup> Now included in Portsmouth. The name was recovered by Mr. Moody.



## THE HOLDERS OF LANDS

held it of earl Godwine as an alod (*in alodium*). It was then, as now, assessed at 3½ hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs, and (there are) 6 villeins and 2 bordars with 2 ploughs. There are 2 serfs. T.R.E. it was, as now, worth 60 shillings. When received, (it was worth) 40 shillings.

The same Hugh holds 1 hide in Borehunte [Boarhunt]; and Tezelin (holds it) of him. Lefsi and Meruen held it of king Edward as an alod (*in alodium*) as 2 manors. It then, as now, paid geld for 1 hide. There is land for 1 plough, which is in (the) demesne; and (there are) 2 villeins and 2 bordars with half a plough, and a mill worth 5 shillings, and half an acre of meadow. It is worth 20 shillings.

The same Hugh holds APLESTEDE [ ];<sup>1</sup> and Tezelin (holds it) of him. Goding held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1½ hides. There is land for 2 ploughs; in (the) demesne is one; and (there are) 13 bordars with half a plough, and a mill worth 15 pence, and half an acre of meadow. There is wood(land) worth 3 swine. One of his men holds half a hide of this land; and he has half a plough with 3 bordars. The whole was worth, T.R.E. and afterwards, 30 shillings; (it is) now (worth) 40 shillings.

### IN BOSEBERG<sup>2</sup> HUNDRET

The same Hugh holds BROCHEM'TUNE [Brockhampton in Havant]; and Herbert the chamberlain (holds it) of him. Sired held it of earl Harold, and could not betake himself (*ire*) anywhere. It was then, and is now, assessed at 2 hides. There is land for 1 plough, which is in (the) demesne, with 1 villein and 4 bordars and half a plough. It is worth 20 shillings.

<sup>1</sup> Ellis, in his *Introduction to Domesday* (I. 42) asserts that 'Aplestede' 'was in Southwick; its site is alone designated in a charter of the time of Edward the First, entered in the Register of Southwick Priory.' But I find, on reference, that this charter, though it mentions Aplestede as in this district, does not place it in Southwick. Mr. Moody ascertained, through the Town Clerk of Portsmouth, that it 'was situated on the west side of Portsmouth Harbour,' and is now largely submerged.

<sup>2</sup> Bosmere.

The same Hugh holds EFFELLE [? Yately].<sup>3</sup> Stenesnoc held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 2 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 14 villeins and 8 bordars with 9 ploughs. There are a church and 2 serfs, and a mill worth 5 shillings, and a fishery worth 100 eels, and 3 acres of meadow. There is wood(land) worth 100 swine. T.R.E., and afterwards, it was worth 100 shillings; now 6 pounds; but it pays 8 pounds.

The same Hugh holds BROMESELLE [Little Bramshill]. Two freemen held it of king Edward as an alod (*in alodium*) as 2 manors. It then paid geld for 1 hide; now for half a hide. There are 2 villeins and 2 bordars with 1 plough, and the fourth part of a mill worth 10 pence, and 3 acres of meadow. There is wood(land) worth 10 swine. T.R.E., and afterwards, it was worth 10 shillings; now 20 shillings.

### IN HOLESETE<sup>4</sup> HUNDRET

The same Hugh holds STRADFELLE [Stratfield Turgis]; and Alvrice (holds it) of him. Alvrice held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 hide. There is land for 4 ploughs. In (the) demesne are 1½ ploughs; and (there are) 5 villeins and 9 bordars with 3 ploughs. There are 4 serfs and a forge (*ferraria*) worth 2 shillings and 2 pence, and a mill for the use of the hall, and 15 acres of meadow. There is wood(land) worth 5 swine. It was always worth 30 shillings.

### IN BROCTON<sup>5</sup> HUNDRET

The same Hugh holds SNODINTONE [Snodington].<sup>6</sup> Tovi held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 5 hides. There is land for 3 ploughs. There is 1 plough in (the) demesne; and (there are) 5 bordars and 2 serfs. T.R.E. it was worth 3 pounds, and afterwards 40 shillings; (it is) now (worth) 4 pounds.

The same Hugh holds LOCHERLEGA [Lockerley]. Sterre held it of king Edward

<sup>3</sup> This is Mr. Moody's identification. I do not know his reasons, and can throw no light on it. This remark applies also to 'Bromeselle,' which follows.

<sup>4</sup> Holdshott.

<sup>5</sup> Thorngate.

<sup>6</sup> A farm in Shipton Bellenger.

## A HISTORY OF HAMPSHIRE

as an alod (*in alodium*) as a manor. Then, as now, it paid geld for 1 hide. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 4 bordars and 4 serfs with half a plough; and a mill worth 10 shillings, and 6 acres of meadow. There is wood(land) worth 3 swine. The same Sterre held 1 hide, which has been made part of (*missa est in*) the King's forest. The whole was worth, T.R.E. and afterwards, 15 shillings; (it is) now (worth) 30 shillings.

The same Hugh holds WALLOPE [Wallop] as half a manor. Godric held it of king Edward as an alod (*in alodium*). It then paid geld for 1½ hides; now for 1 virgate. In (the) demesne is 1 plough with 4 bordars. T.R.E. it was worth 20 shillings, and was afterwards, as now, worth 15 shillings.

The same Hugh holds<sup>1</sup> SIREFELLE [Sherfield English]. Edric held it of king Edward as an alod (*in alodium*). It then paid geld for 6 hides; now for 2½ hides. There is land for 8 ploughs. In (the) demesne is 1 plough; and (there are) 11 villeins and 6 bordars with 8 ploughs. There are 2 serfs, and a mill worth 5 shillings, and 2 acres of meadow. There is wood(land) worth 20 swine. T.R.E., and afterwards, it was worth 3 pounds; (it is) now (worth) 4 pounds.

The same Hugh holds 1 hide in WALLOPE [Wallop] and Boda (holds it) of him. Edric held it of king Edward. Then, as now, it paid geld for 1 hide. There is land for 1 plough. There are 2 villeins and 2 bordars with 2 oxen. It was always worth 10 shillings.

### IN ANDOVRE HUNDRET

The same Hugh holds ANNE [Amport]. Edric held it of king Edward as an alod (*in alodium*) as 1 manor. It then paid geld for 10 hides; now for 6 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 7 villeins and 12 bordars with 5 ploughs. There are 3 serfs, and a mill worth 20 shillings. Half a hide of this manor is (*jacet*) in Wallope. T.R.E., and afterwards, it was worth 4 pounds; (it is) now (worth) 6 pounds.

To this manor belong (*pertin'*) 5 hides which Ralf de Mortemer holds. A brother of Edric held them on this condition, that he should hold the land of Edric so long as he behaved well (*bene se haberet*) to him; and that, if he

wished to sell, he could not sell or give (the land) to any one but Edric, of whom he held it. This is attested by (the jurors of) the Hundred.<sup>2</sup>

The same Hugh holds LITELTONE [Littleton (Copse) in Kimpton]. Azor held it of king Edward as an alod (*in alodium*). It then paid geld for 5 hides; now for 5 virgates. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 6 bordars with 3 ploughs. The wood(land) is unproductive (*inutilis*). T.R.E. it was worth 100 shillings; and afterwards was, and is now, worth 4 pounds.

The same Hugh holds 3 hides in CEREWARTONE [Cholderton in Amport]; and Ralf (holds them) of him. Edric held them of king Edward as an alod (*in alodium*) as 1 manor. Then, as now, it paid geld for 3 hides. There is land for 1 plough, which is in (the) demesne, with 1 villein and 1 bordar. T.R.E. it was worth 30 shillings; and was afterwards, and is now, worth 20 shillings.

The same Hugh holds CHEMENTUNE [Kimpton]; and Geoffrey (holds it) of him. Wenesi held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 2 hides. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins and 8 bordars with 1 plough, and 1 serf, and wood(land) which is unproductive (*inutilis*). T.R.E. it was worth 60 shillings, and afterwards 40 shillings; (it is) now (worth) 4 pounds.

The same Hugh holds CLAVESFELLE [Clanville in Penton Grafton];<sup>3</sup> and Herbert (holds it) of him. Azor held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1½ hides. There is land for 1 plough, which is in (the) demesne, with 4 bordars. T.R.E., and afterwards, it was worth 30 shillings; it is now worth 20 shillings.

### IN SIRLET<sup>4</sup> HUNDRET

The same Hugh holds AVERE [Avon<sup>5</sup> (now in Christchurch Hundred)]. Three freemen

<sup>2</sup> This paragraph probably relates to Anne (Savage) which is entered below in the fief of Ralf de Mortemer.

<sup>3</sup> Now in Weyhill.

<sup>4</sup> Shurley.

<sup>5</sup> Mr. Moody identifies this as 'Iford in Christchurch.' My reason for making it

<sup>1</sup> 'Jacet' altered to 'tenet.'



## THE HOLDERS OF LANDS

held it of king Edward as an alod (*in alodium*). It then paid geld for 8 hides; now  $3\frac{1}{2}$  hides. There is land for 4 ploughs. This manor is held by William and Ralf, and another, of Hugh; and (these) have in (the) demesne 3 ploughs; and (there are) 9 villeins and 6 bordars with 4 ploughs. There are 4 serfs and 84 acres of meadow. There was wood(land) worth 90 swine; but the King has now in (his) forest  $1\frac{1}{2}$  hides and half a virgate of the above manor, and half of the wood(land) worth 45 swine. The whole was worth, T.R.E., 10 pounds, and afterwards 8 pounds. What the above tenants have is now worth 100 shillings; and what the King has 100 shillings.

### IN FORDINGEBRIGE HUNDRET

The same Hugh holds ROCHESTRE [Rock-shore?].<sup>1</sup> Aldwin held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1 hide and half a virgate. There is land for 1 plough, which is in (the) demesne, with 7 bordars and 2 serfs, and a mill worth 40 pence. T.R.E., and afterwards, it was worth 10 shillings; (it is) now (worth) 25 shillings.

The same Hugh holds ROCHEFORD [Rockford];<sup>2</sup> and Hugh of St. Quintin (holds it) of him. Also the priest held it of king Edward as an alod (*in alodium*), as a manor. It then paid geld for 2 hides; now for 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 7 villeins and 9 bordars with 1 plough. There are 6 serfs, and 50 acres of meadow. The

Avon (on the river of that name) is that the *Testa de Nevill* assigns to St. John (Hugh's heir) two tenants by knight service 'in Avene,' and the *Nomina Villarum* (1316), which ignores Iford, enters 'Avene' as a vill held by four tenants. Hugh de Port had three in 1086 (*ut supra*), and the earl of Shrewsbury one (p. 477 above). Further proof is found in the fact that the two other places which Domesday assigns to 'Sirlei' Hundred, Ripley and Sopley are precisely those which adjoin Avon. They are widely separated from Iford.

<sup>1</sup> A farm in Breamore. This is Mr. Moody's identification, but I find no such name on the Ordnance map. The place appears to me to be Rockstead farm, in Rockbourne, which I find entered in the forest claims of 1670 as 'Rockstead otherwise Rocksyth.'

<sup>2</sup> A farm in Ellingham.

wood(land) is in the King's forest. It was worth 30 shillings. The whole, T.R.E. and afterwards, was worth 60 shillings; (it is) now (worth) 30 shillings.

The same Hugh holds TIBESLEI [Ibsley]; and Ralf (holds it) of him. Algar held it of king Edward as an alod (*in alodium*). It then paid geld for 4 hides; now for 2 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 6 villeins and 10 bordars with 3 ploughs. There are 3 serfs, and a mill worth 10 shillings, and 700 eels, and 75 acres of meadow. There is wood(land) worth 1 pig. Two hides of this manor are in (the) forest. T.R.E. it was worth 4 pounds, and afterwards 40 shillings; (it is) now (worth) 60 shillings. What (is) in the forest is worth 20 shillings.

The same Hugh holds CERDEFORD [Chardford]; and William<sup>3</sup> (holds it) of him. Two freemen held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 5 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 20 bordars and 4 serfs with 1 plough, and 91 acres of meadow. There is wood(land) worth 2 swine. T.R.E. it was worth 100 shillings; and was afterwards, and is now, worth 4 pounds.

The same Hugh holds  $1\frac{1}{2}$  virgates of land in CLATINGES [ ]; and William<sup>3</sup> (holds them) of him. Two freemen held them of Alwin, but it was not an alod (*alodium*). There are 2 bordars, and 6 acres of meadow. The wood(land) is unproductive (*inutilis*). It was worth 10 shillings; it is now worth 8 shillings.<sup>4</sup>

### IN NETEHAM HUNDRET

The same Hugh holds NORTONE [Norton farm in Selbourn]; and Robert (holds it) of him. Godwin held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 2 hides. There is land for 1 plough, which is in (the) demesne; and (there are) 2 villeins and 3 bordars, and  $7\frac{1}{2}$  acres of meadow. T.R.E. it was worth 30 shillings, and afterwards 20 shillings; (it is) now (worth) 40 shillings.

<sup>3</sup> William de Chernet. This is the entry which is duplicated above on p. 479.

<sup>4</sup> See Introduction for duplication of above entry.

# A HISTORY OF HAMPSHIRE

## HUGH DE PORT HOLDS THE UNDERMENTIONED LANDS OF THE BISHOP OF BAYEUX

### IN NETEHAM HUNDRET <sup>1</sup>

Hugh holds 1 hide in BENESTEDE [Binstead] of the bishop of Bayeux. Boda held it as an alod (*in alodium*) of king Edward as a manor. Half this hide does not pay geld. There is land for 1 plough, which is in (the) demesne, with 4 bordars and half an acre of meadow. T.R.E., and afterwards, it was worth 10 shillings; (it is) now (worth) 20 shillings.

### IN CILLEI <sup>2</sup> HUNDRET

The same Hugh holds SIREBORNE [Monks Sherbourn]. Alnod Cild held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 10½ hides and half a virgate. There is land for 10 ploughs. In (the) demesne are 3 ploughs; and (there are) 8 villeins and 13 bordars with 4 ploughs. There are 5 serfs, and 16 acres of meadow. There is wood(land) worth 23 swine. T.R.E., and afterwards, it was worth 8 pounds; (it is) now (worth) 10 pounds.

The same Hugh holds ODETONE [Wootton-St. Lawrence]. Elmar and Alviet held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 5 hides. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins, and 2 bordars with 1 plough, and 1 acre of meadow. T.R.E., and afterwards, it was worth 50 shillings; (it is) now (worth) 100 shillings.

### IN BERMESPLET <sup>3</sup> HUNDRET

The same Hugh holds ESEWELLE [Ellisfield]. Auti held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 8 hides. There is land for 10 ploughs. In (the) demesne is 1 plough; and there are 8 villeins and 4 bordars with 5 ploughs. There are a church, and 4 serfs, and 5 acres of meadow. There is wood(land) for the fences. T.R.E. it was worth 10 pounds, and afterwards 60 shillings; (it is) now (worth) 100 shillings.

### IN PORTESDON <sup>4</sup> HUNDRET

The same Hugh holds COSSEHAM [Cosham]; <sup>5</sup> and Geoffrey (holds it) of him.

Bricsmar held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 2 hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 4 bordars with half a plough, and 4 serfs. It was worth 40 shillings; (it is) now (worth) 30 shillings.

### IN EGHEIET <sup>6</sup> HUNDRET

The same Hugh holds HERNE [Hurn in Christchurch]; and Hugh (holds it) of him. It was then, as now, assessed at 1 hide. Two allodial owners (*alodiarii*) held it. There is land for 1 plough, which is there with 3 bordars, and 1 serf, and half a fishery worth 2 pence. T.R.E., and afterwards, it was worth 20 shillings; (it is) now (worth) 36 shillings.

The same Hugh holds 1 hide in CHENEP [Knapp in Christchurch]; and Hugh (holds it) of him. Three allodial owners (*alodiarii*) held it in parage (*in paragio*) of king Edward; and there were three halls. Then, as now, (it was assessed) at 1 hide. There is land for 1 plough, which is there with 1 serf, and (there are) a mill worth 20 shillings, and a fishery worth 50 pence, and 16 acres of meadow. T.R.E. it was worth 20 shillings; (it is) now (worth) 30 shillings.

The same Hugh holds 1 hide in demesne, which was held by Wislac of king Edward; and he had a hall. Then, as now, (it was assessed) at 1 hide. It is called STANPETA [Stanpit in Christchurch]. There is land for 1 plough.<sup>6</sup> . . . It was, and is now, worth 15 shillings.

The same Hugh holds STANPETA [Stanpit in Christchurch]. Godwine the priest held it of king Edward. It was then, as now, assessed at 2 hides. There is land for 2 ploughs. In (the) demesne is half a plough; and (there are) 2 villeins and 2 bordars with half a plough. There are 8 acres of meadow. T.R.E., and afterwards, it was worth 20 shillings; (it is) now (worth) 40 shillings; but it pays 60 shillings.

### IN SIRLEI <sup>7</sup> HUNDRET

The same Hugh holds RIPLE [Ripley in Sopley]; and Hugh (holds it) of him. Wisla(c) held it of king Edward as an alod (*in alo-*

<sup>1</sup> Alton and Selbourne.

<sup>2</sup> Chuteley.

<sup>3</sup> Bermondspitt.

<sup>4</sup> Portsdown.

<sup>5</sup> In Wymering and Widley.

<sup>6</sup> Part of Christchurch.

<sup>6</sup> A blank here in the MS.

<sup>7</sup> Shurley.



## THE HOLDERS OF LANDS

*dium*). It was then, as now, assessed at half a hide. There is land . . . In (the) demesne is 1 plough; and (there are) 3 bordars, and 8 acres of meadow. The wood(land) is in the King's forest. T.R.E., and afterwards, it was worth 20 shillings; (it is) now (worth) 15 shillings.

### IN MANESBRIGE<sup>1</sup> HUNDRET

The same Hugh holds 1 hide in RODBRIGE [Redbridge]. Tovi held it of the King. Then, as now, (it was assessed) at 1 hide. There are 4 villeins and 1 bordar with 1 plough, and 2 mills worth 50 shillings, and 1 acre of meadow. T.R.E., and afterwards, it was worth 10 shillings; it is now worth 50 shillings.

### IN RODBRIGE<sup>2</sup> HUNDRET

The same Hugh holds half a hide in LESTRED [? Testwood in Eling];<sup>3</sup> and Hugh (holds it) of him. Also held it of king Edward. It was then, as now, assessed at half a hide. There is land for half a plough, which is there, with 4 villeins and 2 acres of meadow. It was, and is now, worth 10 shillings.

fo. 46b.

The same Hugh holds TITEGRAVE [Tidgrove];<sup>4</sup> and Faderlin (holds it) of him. Osulf held it of king Edward. It was then, and is now, assessed at 1 hide and 1 virgate. There is land for 2½ ploughs. In (the) demesne is 1 plough; and (there are) 2 bordars, and a mill worth 50 pence, and half an acre of meadow. It was always worth 25 shillings.

## THE LAND OF HUBERT DE PORTH

### IN BASINGESTOC HUNDRET

XXIV. HUBERT de Port holds MAPLEDREWELLE [Mapledurwell] of the King. An-

<sup>1</sup> Mainsborough.

<sup>2</sup> Redbridge.

<sup>3</sup> This name is not identified by Mr. Moody, but seems to be identical with 'Lestorde' (fo. 51), which he identifies as above with Testwood, for 'Terstewode' is entered under Redbridge Hundred in the *Nomina Villarum* (1316).

<sup>4</sup> South of Kingsclere. Not identified by Mr. Moody. In the return of 1346 it is entered as 'Titegrave' in Clere Hundred, and in the St. John Inq. p. ms. of the 14th century it is found held of them with Knowle as a double knight's fee. They were also both held by Faderlin in 1086.

schill held it of king Edward, and could betake himself (*ire*) where he would. It was then assessed at 5 hides; now at 2½ hides. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 12 villeins and 8 bordars with 5 ploughs. There are 6 serfs, and 2 mills worth 32 shillings and 6 pence. T.R.E., and afterwards, it was, as now, worth 10 pounds; but it pays 13 pounds.

## THE LAND OF WILLIAM DE PERCI

### IN MENESTOC<sup>5</sup> HUNDRET

XXV. WILLIAM de Perci holds AMBLE-DUNE [Hambleton]. He received it with his wife. Alwin held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 6 villeins and 6 bordars with 2 ploughs. There are 2 serfs, and a mill worth 12 pence. There is wood(land) worth 4 swine. T.R.E. it was, as now, worth 4 pounds. When received, it was worth 3 pounds.

## THE LAND OF ERNULF DE HESDING

### IN ESSEBURNE HUNDRET

XXVI. ERNULF de Hesding holds CUMBE [Combe] of the King. Edric held it of king Edward. It was then assessed at 3 hides; now at 2 hides. There is land for 9 ploughs. In (the) demesne are 3 ploughs; and (there are) 10 villeins and 12 bordars with 7 ploughs. There are a church and 6 serfs, and wood(land) for the fences. T.R.E., and afterwards, it was worth, as now, 6 pounds.

## THE LAND OF EDWARD OF SALISBURY<sup>6</sup>

### IN NETEHAM<sup>7</sup> HUNDRET

XXVII. EDWARD of Salisbury (*Sarisberia*) holds BRENRESETE [Bramshott] of the King. Two freemen held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 6 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 10 villeins and 3 bordars with 4

<sup>5</sup> Meonstoke.

<sup>6</sup> The sheriff of Wiltshire. See No. XII. above.

<sup>7</sup> Alton and Selbourne.

## A HISTORY OF HAMPSHIRE

ploughs. There are 2 mills worth 100 pence, and 2 acres of meadow. There is wood(land) worth 4 swine. T.R.E., and afterwards, it was, as now, worth 100 shillings. William Maldoit claims 1 hide of this land, which was (*jacuit*) in Harlege [Hartley Mauditt], and the Hundred and the shire testify to this.

### IN FORDINGEBRIGE HUNDRET

The same Edward holds CERDEFORD [Chardford];<sup>1</sup> and Rannulf (holds it) of him. Alnod held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 5 hides. There is land for 4 ploughs. In (the) demesne is 1 plough. There are 9 bordars, and 4 serfs, and a mill worth 15 shillings, and 1,250 eels. There are 50 acres of meadow. There is wood(land) worth 4 swine. Ingulf holds 1 hide belonging to this manor; and there he has 1 plough with 2 bordars. T.R.E. it was, as now, worth 100 shillings. When received, it was worth 60 shillings.

## THE LAND OF ROBERT SON OF GEROLD

### IN CILLEI<sup>2</sup> HUNDRET

XXVIII. Robert son of Gerold holds ACLEI [Oakley] of the King. Tovi held it of king Edward. It was then, as now, assessed at 1½ hides. There is land for 1 plough. There are 2 villeins and 2 bordars with 2 ploughs.

There is half a virgate of land in GERLEI<sup>3</sup> [ ] which Bolle held of king Edward as an alod (*in alodium*); but Robert added it (*apposuit eam*) to this manor. The (jurors of the) Hundred, however, affirm that it never belonged to it (*ibi*). The whole, T.R.E. and afterwards, was worth 15 shillings; (it is) now (worth) 20 (shillings).

### IN PORTESDON<sup>4</sup> HUNDRET

The same Robert holds COPENORE [Copnor in Portsea]; and Heldred (holds it) of him. Tovi held it of earl Godwine; and could not betake himself elsewhere (*ire alio*). It

was then, as now, assessed at 3 hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 2 bordars and 2 serfs with 2 ploughs. There is a saltpan worth 8 pence. T.R.E. it was, as now, worth 60 shillings. When received, it was worth 30 shillings.

### IN BROCTONE<sup>5</sup> HUNDRET

The same Robert holds TEDORDE [South Tidworth]. Two freemen held it of king Edward as an alod (*in alodium*), as 2 manors. Then, as now, it paid geld for 4 hides. Robert made one manor (of it). There are 1 villein with 5 bordars who have 1 plough. T.R.E., and afterwards, it was worth 40 shillings; (it is) now (worth) 30 shillings.

The same Robert holds SCEPTONE [Shipton Bellenger]. Ulstan held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1½ hides. There are 2 villeins with half a plough. It was always worth 20 shillings.

The same Robert holds BOSINTONE [Bosington]. Tovi held it of king Edward as an alod (*in alodium*), as a manor. Then, as now, it paid geld for 2 hides and 1 virgate. There is land for 1 plough, which is in (the) demesne, with 3 bordars. T.R.E. it was worth 50 shillings, and afterwards 30 shillings; (it is) now (worth) 40 shillings.

### IN ANDOVRE HUNDRET

The same Robert holds TODEORDE [South Tidworth]; and Hugh (holds it) of him. Codolf held it of earl Harold as an alod (*in alodium*). Then, as now, it paid geld for 7 hides. There is land for 4 ploughs. In (the) demesne are 3 ploughs; and (there are) 3 villeins and 9 serfs with 1 plough. There are a church and 4 acres of meadow, and a small wood. T.R.E. it was, as now, worth 10 pounds; when received, 100 shillings.

### IN BERTUNE<sup>6</sup> HUNDRET

The same Robert holds SUDTUNE [Sutton Scotney in Wonston]. Tovi held it of earl Godwine. It was then assessed at 5 hides; now at 2 hides and a half.<sup>7</sup> There is land

<sup>1</sup> In Breamore.

<sup>2</sup> Chutely.

<sup>3</sup> This place seems to have been in or near Deane or Church Oakley; but the name is not found on the Ordnance map.

<sup>4</sup> Portsdown.

<sup>5</sup> Thorngate.

<sup>6</sup> Barton Stacey.

<sup>7</sup> Altered from '3 virgates,' which is underlined for deletion.



## THE HOLDERS OF LANDS

for 4 ploughs. In (the) demense is 1 plough; and (there are) 4 villeins and 4 bordars with 2 ploughs. There are a church and 8 serfs, and a mill worth 6 shillings and 3 pence, and 10 acres of meadow. T.R.E. it was worth 6 pounds, and afterwards 4 pounds; (it is) now (worth) 100 shillings.

### IN TICEFEL<sup>1</sup> HUNDRET

The same Robert holds half a hide in FUNTELEI [Funtley in Titchfield]. Tovi held it of king Edward. It was then, as now, assessed at half a hide. There is land for 1 plough. There are 3 bordars and 6 acres of meadow. There is wood(land) worth 3 swine. It was, as now, worth 20 shillings.

### IN FORDINGEBRIGE HUNDRET

The same Robert holds FORDE [Fording-bridge]; and Robert holds it of him. Alwi held it of king Edward as an alod (*in alodium*). It was then assessed at 2 hides and 3 virgates; now at 2 hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and 13 bordars have 1 plough. There are a church and 2 mills worth 14 shillings and 2 pence, and 30 acres of meadow. Of this manor, 3 virgates are in the King's forest; also the whole wood(land), worth 20 shillings. T.R.E. it was worth 60 shillings, and afterwards 30 shillings; (it is) now (worth) 60 shillings.<sup>2</sup>

## THE LAND OF RALF DE MOR- TEMER

### IN BYTLESGETE<sup>3</sup> HUNDRET

XXIX. RALF de Mortemer holds OTREBURN [Otterbourn]. Cheping held it of the bishopric of Winchester, and could not withdraw himself (*recedere*) from (the lordship of) the church. It was then, as now, assessed at 4 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 10 villeins and 8 bordars with 2 ploughs. There are a church and 6 serfs, and 50 acres of meadow, and a fishery worth 2 shillings; from the pasture (come) 10 shillings. T.R.E. it was worth 8 pounds; and was afterwards, as now, worth 100 shillings.

### IN BERTUNE<sup>4</sup> HUNDRET

The church of ST. VICTOR<sup>5</sup> holds BERTUNE [Barton Stacey] of Ralf. Cheping held it of king Edward in parage (*in paragio*). It was then assessed at 1 hide; now at 1 virgate. There is land for 2 ploughs. There are 9 oxen and 1 villein and 5 bordars, and 6 acres of meadow and 1 serf. T.R.E. it was worth 60 shillings, and was afterwards, as now, worth 30 shillings.

The same Ralf holds ORDIE [Headbourne Worthy]. Cheping held it of king Edward. It was then, and is now, assessed at 1 hide. There is land for 5 ploughs. In (the) demesne are 3 ploughs; and (there are) 1 villein and 27 bordars with 2 ploughs. There are a church and 24 serfs, and 3 mills worth 60 shillings, and 5 acres of meadow. The pasture produces (*pro herbagio*) 40 shillings; and (there are) 8 haws (*bagæ*) in Wincestre (Winchester) worth 65 shillings and 4 pence. T.R.E. it was worth 25 pounds, and afterwards 10 pounds; (it is) now (worth) 15 pounds. This manor, T.R.E., was bought from the church (*extra æcclesiam*) on these terms and conditions, that the church of St. Peter of the bishopric<sup>6</sup> should receive it (back) with all (its) stock after the death of the third possessor (*hæres*); and Ralf, who now holds it, is the third possessor (*hæres*).

The same Ralf holds ORDIE [Worthy]. Ezi held it T.R.E. It was then assessed at 1 hide and 1 virgate; now at nothing. There is land for 1 plough. It was (formerly) a manor, but it is now added to (*appositum in*) another manor. T.R.E. it was, and is now, worth 40 shillings.

### IN MANESBRIGE<sup>7</sup> HUNDRET

The same Ralf holds SIRELEI [Shirley in Millbrook]. Cheping held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 8 ploughs. There are 4 villeins and 3 bordars with 2 ploughs. There are a church and 5 serfs, and a mill worth 30 pence, and 12 acres of meadow. There is wood(land) worth 6 swine. There are, besides, 4 messuages (*masuræ*) in Hantone [Southampton] worth 40 pence;<sup>8</sup> and a

<sup>1</sup> Titchfield.

<sup>2</sup> The entry of this manor being a post-script (see Introduction) overflows into the margin.

<sup>3</sup> Part of Buddlesgate.

<sup>4</sup> Barton Stacey.

<sup>5</sup> St. Victor-en-Caux in Normandy.

<sup>6</sup> The Old Minster (St. Swithin's).

<sup>7</sup> Mainsborough.

<sup>8</sup> Compare fo. 52 below.

## A HISTORY OF HAMPSHIRE

fishery worth 6 shillings. T.R.E., and afterwards, it was, as now, worth 100 shillings.

fo. 47.

The same Ralf holds BOTELIE [Botley]. Cheping held it of king Edward. It was then, as now, assessed at 2 hides. There is land for 6 ploughs. There are 8 villeins and 4 bordars with 4 ploughs. There are a church and 4 serfs, and 2 mills worth 20 shillings, and 12 acres of meadow. Wood(land) is wanting (*deest*). T.R.E. it was worth 10 pounds, and was afterwards, and is now, worth 100 shillings.

The same Ralf holds BEDESLEI [North Baddesley]. Then, as now, it was assessed at 2 hides. There is land for 4 ploughs. There are 4 villeins and 7 bordars with 2 ploughs, and 7 serfs. There is a church and wood(land) worth 10 swine and ten shillings (are paid) for the pasture (*herbagio*). T.R.E. it was worth 10 pounds, and afterwards 100 shillings; (it is) now (worth) 60 shillings.

### IN CLERE<sup>1</sup> HUNDRET

The same Ralf holds CHENOL [Knowle],<sup>2</sup> and Oidelard (holds it) of him. Cheping held it of king Edward. It was then, as now, assessed at 2 hides. There is land for 3 ploughs. In (the) demesne are 2 ploughs, and (there are) 2 villeins and 10 bordars with 1 plough. There are 4 serfs, and 2 mills worth 11 shillings and 3 pence. There is wood(land) worth 5 swine. T.R.E., and afterwards, it was worth 60 shillings; (it is) now (worth) 70 shillings.

The same Ralf holds 1 hide in SUANTUNE [Swampton in St. Mary Bourne]. Cheping held it of the bishop and monks; and it was always the minster's (*de monasterio*). But it was granted to him to hold for his own life only, after which it was to revert to the church. This is affirmed by the monks; but the (jurors of the) Hundred know nothing of (such) an agreement; but they know this, that it was the minster's, and that it did not give geld, nor does it (*facit*) now; and they know not why it has (thus) continued (*remansit*). There is land for 1 plough, which is in (the) demesne with 2 villeins and 3 bordars, and a mill worth 15 shillings. T.R.E., and afterwards, it was, as now, worth 20 shillings.

### IN TICEFEL<sup>3</sup> HUNDRET

The same Ralf holds 1 virgate of land,

which was held by Cheping of king Edward. It paid geld then, as now, for 1 virgate. There is land for half a plough, which 2 villeins have there, and also half an acre of meadow. T.R.E. it was worth 5 shillings, and afterwards 3 shillings; it is now worth 7 shillings.

### IN SUMBURNE<sup>4</sup> HUNDRET

The same Ralf holds 1 manor, which Cheping held of king Edward. It then paid geld for 2 hides, now for 1½ hides. There is land for 3 ploughs. In (the) demesne, however, are 2 ploughs, and (there are) 1 villein and 8 serfs with 1 plough, and a mill worth 7 shillings and 6 pence, and 15 acres of meadow. Of this land Waleran holds 1 hide of Ralf, and there he has 3 bordars. T.R.E. (the whole) together was worth 7 pounds, and afterwards 4 pounds. Ralf's share is now worth 4 pounds, and Waleran's 20 shillings; but it pays 30 shillings.

### IN NETEHAM<sup>5</sup> HUNDRET

The same Ralf holds 2 hides of the King, in NORTONE<sup>6</sup> [Norton in Selbourne], which Elwin' held as an alod (*in alodium*) of king Edward as 1 manor. It was then, as now, assessed at 2 hides. There is land for 1 plough, which is in (the) demesne; and (there are) 2 villeins and 1 bordar and 1 serf, and 7½ acres of meadow. It is worth 40 shillings.

### IN BERMESPLET<sup>7</sup> HUNDRET

The same Ralf holds CANDOVRE [Preston Candover], and Oidelard (holds it) of him. Cheping held it of king Edward as an alod (*in alodium*). It then paid geld for 5 hides; now for 4½ hides. There is land for 6 ploughs. In (the) demesne is 1 plough; and (there are) 1 villein and 2 bordars and 3 serfs, and 5 acres of meadow. T.R.E. it was worth 8 pounds, and afterwards 100 shillings; it is now worth 4 pounds.

### IN HOLESETE<sup>8</sup> HUNDRET

The same Ralf holds SILCESTRE [Silchester]. Cheping held it of earl Harold as an alod (*in alodium*). It was then assessed at 5 hides, now at 3 hides. There is land for 5 ploughs. There are 9 villeins and 13 bordars with 4 ploughs, and 3 serfs, and 6 acres of meadow.

<sup>4</sup> King's Sombourne.

<sup>5</sup> Alton and Selbourne.

<sup>6</sup> Interlined.

<sup>7</sup> Bermondspitt.

<sup>8</sup> Holdshott.

<sup>1</sup> Kingsclere.

<sup>2</sup> See p. 481 above.

<sup>3</sup> Titchfield.



# THE HOLDERS OF LANDS

There is wood(land) worth 20 swine. T.R.E. it was worth 100 shillings; it was afterwards, as now, worth 60 shillings.

## IN ANDOVRE HUNDRET

The same Ralf holds ANNE [Anne],<sup>1</sup> and Ilgeramnus (holds it) of him. Edric held it T.R.E. It paid geld then, as now, for 5 hides. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 7 villeins and 6 bordars with 2 ploughs. There are 3 serfs, and a mill worth 25 shillings, and 2 acres of meadow. There is wood(land) without pannage. T.R.E. it was worth 100 shillings, and afterwards 40 shillings; it is now worth 4 pounds.

## IN MANTESBERG<sup>2</sup> HUNDRET

The same Ralf holds a manor (called) STRADFELLE<sup>3</sup> [Stratfield Mortimer],<sup>4</sup> which Cheping held T.R.E. It was then assessed at 5 hides, now at 1 hide. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 villeins and 9 bordars with 1 plough. There are 6 serfs, and 2 acres of meadow. T.R.E. it was worth 12 pounds, and afterwards 10 pounds; it is now worth 6 pounds.

## THE LAND OF EUDO SON OF HUBERT<sup>5</sup>

### IN OVRETUNE<sup>6</sup> HUNDRET

XXX. EUDO the son of Hubert holds ESSE [Ashe] of the King. Ælwacre held it of earl Harold. It was then assessed at 8 hides, now at 3 hides. There is land for 8 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 villeins and 10 bordars with 3 ploughs. There are a church and 10 serfs, and 3 acres of meadow. T.R.E. it was worth 7 pounds; and afterwards, as now, 6 pounds 10 shillings; this (diminution is) for half a hide less (there) through (the action of) Hugh the sheriff.

<sup>1</sup> Afterwards known (from the family holding it) as Anne Savage.

<sup>2</sup> Bountisborough.

<sup>3</sup> Interlined.

<sup>4</sup> The present 'Stratfield Mortimer,' which is in Berks, is the 'Stratfeld' (Berks) of Domesday; but as Domesday enters four estates at 'Stradfelle' (Hants) in addition to Hugh de Port's, identification is difficult.

<sup>5</sup> Eudo 'dapifer,' founder of St. John's Abbey, Colchester, and son of Hubert de Ryes.

<sup>6</sup> Overton.

## THE LAND OF WILLIAM BERTRAN

### IN OVRETUNE HUNDRET

XXXI. WILLIAM Bertram holds POLEMETUNE [Polhampton in Overton] of the King. Tosti held it T.R.E. It was then assessed at 3½ hides.<sup>7</sup> There is land for 6 ploughs. In (the) demesne are 1½ ploughs; and (there are) 5 villeins and 9 bordars with 3 ploughs. There are a church and 10 serfs, and 3 acres of meadow. There is wood(land) worth 10 swine from the pannage. T.R.E. it was worth 12 pounds, and afterwards, as now, 8 pounds; but it was farmed at (*fruit ad*) 9 pounds.

## THE LAND OF WILLIAM DE OW

### IN SUMBURNE HUNDRET

XXXII. WILLIAM de Ow holds SUMBURNE [King's Sombourn] of the King. Tol, the Dane, held it of king Edward. It was then assessed at 14 hides, now at 7½ hides. There is land for 12 ploughs. In (the) demesne are 2 ploughs; and (there are) 19 villeins and 5 bordars with 8 ploughs. There are 13 serfs, and a mill worth 10 shillings, and 68 acres of meadow, and 9 houses (*man-siones*) of burgesses which pay 12 shillings and 2 pence. T.R.E., and afterwards, it was, as now, worth 14 pounds; but it is farmed for (*reddit de firma*) 16 pounds.

### IN CILLEI<sup>8</sup> HUNDRET

The same William holds DENE [Deane]. Thol held it of king Edward as an alod (*in alodium*). It was then assessed at 20 hides, now at 11 hides. There is land for 10 ploughs. In (the) demesne are 3 ploughs; and (there are) 12 villeins and 10 bordars with 7 ploughs. There are 11 serfs, and wood(land) worth 1 pig. T.R.E. it was worth 10 pounds, and afterwards 11 pounds; it is now worth 12 pounds.

The same William holds half a virgate of land and 4 acres in GERLEI [ ].<sup>9</sup> Edward held it of king Edward as an alod (*in alodium*). It is now placed (*appositum*) with the above manor of Dene, and belongs to it (*ibi*), as the (jurors of the) Hundred affirm.

<sup>7</sup> No other assessment recorded.

<sup>8</sup> Chutely.

<sup>9</sup> This place should be close to Deane and Church Oakley; but the name seems lost now.

# A HISTORY OF HAMPSHIRE

## IN HOLESETE<sup>1</sup> HUNDRET

The same William holds SILCESTRE [Silchester], and Ralf Bloiet<sup>2</sup> (holds it) of him. Alestan held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 5 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 5 bordars with 3 ploughs. There are 4 serfs, and 2 acres of meadow. There is wood(land) worth 60 swine. T.R.E., and afterwards, it was worth 100 shillings; it is now worth 6 pounds.

## THE LAND OF WILLIAM DE BRAIOSE

### IN NETEHAM<sup>3</sup> HUNDRET

XXXIII. WILLIAM DE BRAIOSE holds half a hide of the King. Wenesi held it of king Edward by customary service (*ad consuetudinem*), as did his predecessor, who was a goat-herd (*mediator caprarum*). He could not betake himself (*se vertere*) to another lord. It now pays geld for half a hide. There is 1 plough in (the) demesne. Ricoardus holds (it) of William. T.R.E. it was worth 10 shillings. It was afterwards, as now, worth 5 shillings.

## THE LAND OF WILLIAM DE WAREN

### IN PORTESDON<sup>4</sup> HUNDRET

XXXIV. WILLIAM de Warene holds FRDINTONE [Fratton in Portsea], and Oismelin (holds it) of him. Chetel held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 4 hides. There is land for 3 ploughs. In (the) demesne is 1 plough, and (there are) 4 villeins and 4 bordars with 2 ploughs. There are 4 serfs. T.R.E. it was worth 60 shillings, and afterwards 30 shillings; it is now worth 40 shillings.

fo. 47b.

## THE LAND OF WILLIAM MALDUITH

### IN TICEFEL<sup>5</sup> HUNDRET

XXXV. WILLIAM Maldoit holds RUENORE [Rowner]. Coleman held it of king Edward. It was then assessed at 5 hides; now at 2½

hides. There is land for 4 ploughs. In (the) demesne are 1½ ploughs; and (there are) 2 serfs and 1 acre of meadow and wood(land) worth 4 swine; and 10 villeins and 2 bordars with 2½ ploughs. T.R.E. it was worth 70 shillings, and afterwards 30 shillings; it is now worth 70 shillings.

### IN NETEHAM<sup>6</sup> HUNDRET

The same William holds HERLEGE [Hartley Mauditt]. Guert held it of king Edward as an alod (*in alodium*). It was then assessed at 6 hides, and afterwards at 3 hides; but the county court (*comitatus*) has not seen the King's writ and seal for this (*inde*). It is now assessed at 2 hides. There is land for 8 ploughs. In (the) demesne are 2 ploughs; and (there are) 8 villeins and 5 bordars with 5 ploughs, and 6 acres of meadow. There is wood(land) worth 30 swine. T.R.E. it was worth 8 pounds, and afterwards 3 pounds; it is now worth 7 pounds.

The same William holds BESSETE [Bradshott in Selbourn]. Ulward and Alvrice held it, as 2 manors, of king Edward as an alod (*in alodium*). It was then, as now, assessed at 2½ hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 4 bordars, and 2 serfs, and a mill worth 40 pence, and 3 acres of meadow. There is wood(land) worth 5 swine. T.R.E. it was worth 3 pounds; and afterwards, as now, 4 pounds.

### IN PORTESDON<sup>7</sup> HUNDRET

The same William holds PORCESTRE [Porchester]. Three freemen held it, as 3 manors, of king Edward. It then paid geld for 5 hides, now for 2½ hides; and it is one (*in uno*) manor. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 4 bordars with 1½ ploughs. There are 4 serfs, and a fishery for the use of the hall (*ad ballam*). There is wood(land) for 5 swine. Of this manor, Durand holds 1 hide of William, and he has in (the) demesne 1 plough, and a mill worth 30 pence. The whole was worth, T.R.E., 4 pounds 10 shillings, and afterwards 100 shillings; it is now worth 6 pounds.

The same William holds 1 hide, and Fulcold (holds it) of him. Alward held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 1

<sup>1</sup> Holdshott.

<sup>2</sup> This word interlined.

<sup>3</sup> Alton and Selbourne.

<sup>4</sup> Portsdown.

<sup>5</sup> Titchfield.

<sup>6</sup> Alton and Selbourne.

<sup>7</sup> Portsdown.



## THE HOLDERS OF LANDS

plough. In (the) demesne is half a plough; and (there are) 2 villeins and 2 serfs with half a plough. It is worth 15 shillings.

The same William holds 2 hides less 1 virgate. Alvríc held it, as 1 manor, as an alod (*in alodium*) of the King. Then, as now, it paid geld for 2 hides less 1 virgate. There is land for 2 ploughs. In (the) demesne is 1 plough, and (there are) 3 villeins and 4 bordars with half a plough. There are 2 serfs, and 2 mills worth 5 shillings, and 2 acres of meadow. T.R.E. and afterwards, it was worth 25 shillings; it is now worth 30 shillings.

### IN BERMESPLET<sup>1</sup> HUNDRET

The same William holds CANDEVRE [Preston Candover]. Two freemen held it as 2 manors, of king Edward. It was then assessed at 5 hides, now at 2½ hides; and it is one (*in uno*) manor. There is land for 6 ploughs. In (the) demesne are 1½ ploughs; and (there are) 7 villeins and 2 bordars with 2 ploughs. There are 14 serfs, and 4 acres of meadow. There is wood(land) for the fences. T.R.E., as now, it was worth 100 shillings. When received, it was worth 60 shillings.

### IN ODIHAM<sup>2</sup> HUNDRET

The same William holds SELDENE [Shaldern]. Four freemen held it of king Edward as an alod (*in alodium*). It then paid geld for 5 hides, now for 3 hides and 1 virgate. There is land for 6 ploughs. In (the) demesne are 1½ ploughs; and (there are) 11 villeins and 8 bordars with 7 ploughs. There are 8 serfs. T.R.E., as now, it was worth 100 shillings. When received, it was worth 60 shillings.

### IN ANDOVRE HUNDRET

The same William holds 5 hides of land, which Ulveva held, as 1 manor, as an alod (*in alodium*) of king Edward. They then paid geld for 5 hides, now for 3 hides. It is called Fífhide [Fifield].<sup>3</sup> There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 10 villeins and 5 bordars with 3 ploughs. There are a church, and 2 serfs, and 2 acres of meadow. T.R.E., as now, (it was) worth 100 shillings. When received, it was worth 50 shillings.

<sup>1</sup> Bermondspitt.

<sup>2</sup> Now part of Odiham Hundred.

<sup>3</sup> This clause is a marginal note. The name is one of those which recall the five-hide unit of assessment in the Anglo-Saxon system.

## THE LAND OF ALVRED DE MERLEBERG

### IN BROCTON<sup>4</sup> HUNDRET

XXXVI. ALVRED' de Merleberge holds SCEPTUNE [Shipton Bellenger], and Rainald (holds it) of him. Carle held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 10½ hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 3 bordars with 3 ploughs. There is wood(land) for (the) fences. There are a church and 6 serfs. T.R.E., and afterwards, it was, as now, worth 60 pounds.

### IN BASINGESTOC HUNDRET

The same Alvred' holds ESTROPE [Eastrop], and Hugh (holds it) of him. Carle held it of king Edward, and could betake himself (*ire*) where he would. It was then, as now, assessed at 3 hides. There is land for 3 ploughs; in (the) demesne is 1 plough; and (there are) 2 villeins and 15 bordars with 2 ploughs. There are 3 serfs, and a mill worth 7 shillings and 6 pence. T.R.E., as now, it was worth 4 pounds. When received, it was worth 3 pounds.

## THE LAND OF DURAND DE GLOWECESTRE

### IN BASINGESTOCS HUNDRET

XXXVII. DURAND' de Gloucestre holds CLERESDEN [Cliddesden] of the King; and Ralf (holds it) of him. Two brothers held it of king Edward, and could betake themselves (*ire*) whither they would. It was then, as now, assessed at 2 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 6 villeins and 10 bordars with 2 ploughs. There are a church and 9 serfs. T.R.E. it was worth 4 pounds; it was afterwards, as now, worth 3 pounds.

### IN ODINGETON HUNDRET<sup>5</sup>

The same Durand' holds WESTONE [Weston Patrick], and Geoffrey (holds it) of him. Edric held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 2 hides. There is land for 2 ploughs. In (the) demesne is 1 plough with 3 bordars and 1 serf. T.R.E. (it was), as now, worth 40 shillings. When received, it was worth 20 shillings.

<sup>4</sup> Thorngate.

<sup>5</sup> Now in Odiham Hundred.

# A HISTORY OF HAMPSHIRE

## THE LAND OF TURSTIN SON OF ROLF

### IN NETEHAM<sup>1</sup> HUNDRET

(XXXVIII). TURSTIN' the son of Rolf holds NEWENTONE [Newton Valence] of the King. Brictric held it of king Edward as an alod (*in alodium*). It was then (assessed) at 10 hides; it is now assessed at 5 hides. There is land for 12 ploughs. In (the) demesne are 3 ploughs; and (there are) 9 villeins and 5 bordars with 9 ploughs. There are a church and 6 serfs, and 2 mills worth 100 pence, and 6 acres of meadow. There is wood(land) worth 100 swine. T.R.E., and afterwards, it was worth 15 pounds. It is now worth 12 pounds.

## THE LAND OF BERNARD PANCE- VOLT

### IN SUMBURNE<sup>2</sup> HUNDRET

(XXXIX). BERNARD' Pancevolt holds ABERDRIC [Awbridge] of the King. Godwine held it of king Edward, and was at liberty to betake himself (*ire*) where he would. It was then assessed at 1 hide; it is now assessed at 1 virgate. There is land for 2 (ploughs).<sup>3</sup> There are 2 villeins with half a plough and 7 acres of meadow. There is wood(land) worth 2 swine. T.R.E., and afterwards, it was worth 60 shillings. It is now worth 30 shillings.

The same Bernard holds SUMBURNE [Little Sombourne].<sup>4</sup> Godwine held it of king Edward. It was then assessed at 2 hides, now at 1 virgate. There is land for 2 ploughs. In (the) demesne are 2 ploughs, and (there are) 1 villein and 7 serfs. T.R.E. it was worth 60 shillings; and afterwards, as now, 70 shillings.

### IN BERTUNE<sup>5</sup> HUNDRET

The same Bernard holds ORDIE [Worthy], Godwine held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 2 ploughs, which are in (the)

demesne; and (there are) 3 serfs, and 2 acres of meadow, and 1 messuage (*masura*) in Wincest[re] which pays nothing. T.R.E. it was worth 12 pounds; and afterwards, as now, 6 pounds.

### IN MANESBRIGE<sup>6</sup> HUNDRET

The same Bernard holds CELEORDE [Chilworth]. Godwine held it of king Edward. It was then, as now, assessed at 2 hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins with 1 plough. There are a church and 4 serfs and 3 houses in Hantune<sup>7</sup> [Southampton] worth 18 pence. T.R.E. it was worth 10 pounds, and afterwards 8 pounds. It is now worth (only) 4 pounds, because Bernard has no power to use (*potestatem in*) its woodland.

### IN BRESTON HUNDRET

The same Bernard holds EMELEI [Embley in East Wellow]. Godwine held it of king Edward as an alod (*in alodium*). It was then assessed at half a hide; now at nothing. There is land for half a plough. It was worth 10 shillings; (but) it is now waste.

fo. 48.

## THE LAND OF TURSTIN THE CHAMBERLAIN

### IN SUMBURNE<sup>8</sup> HUNDRET

XL. TURSTIN, the chamberlain, holds HOLSTUNE [Houghton]. Algar and Edward held it of king Edward. It was then assessed at 2½ hides; now at 1 hide 1 virgate and 5 acres of land. In (the) demesne are 1½ ploughs with 5 bordars, and 1 freeman (*franco homine*) and 2 serfs. T.R.E., and afterwards, it was worth 40 shillings. It is now worth 60 shillings.

## THE LAND OF RICHARD STURMID

### IN BITLESGETE<sup>9</sup> HUNDRET

XLI. Richard Sturmi holds CILBODENTUNE [Chilbolton]. Ordwold held it of the bishop of Wincestre, and it was the minster's T.R.E., and (he) could betake himself where he would (*ire quolibet*). It was then assessed at 3 hides and 3 virgates; now at 1 hide. There

<sup>1</sup> Alton and Selbourne.

<sup>2</sup> King's Sombourne.

<sup>3</sup> Omitted in MS.

<sup>4</sup> It seems in favour of this identity that the *Testa de Nevill* (p. 231) shows Mandeville holding of Pauncfote in Little Sombourne under Henry III.

<sup>5</sup> Barton Stacey.

<sup>6</sup> Mainsborough.

<sup>7</sup> See for these three houses fo. 52 below.

<sup>8</sup> King's Sombourne.

<sup>9</sup> Part of Buddlesgate.



## THE HOLDERS OF LANDS

is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 1 villein and 11 bordars, and a mill worth 7 shillings and 6 pence. T.R.E. it was, as now, worth 4 pounds. When received, it was worth 40 shillings.

### THE LAND OF RICHARD PUINGIANT

#### IN MANEBRIGE HUNDRET

XLII. RICHARD Puingiant holds LATELIE [Netley<sup>1</sup> in Hound]. Alward' held it of king Edward, and could betake himself (*ire*) where he would. It was then assessed at 3 hides; it is now assessed at 1 hide. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 9 villeins and 2 bordars with 2 ploughs. There are a chapel (*æcclesiola*), and 2 serfs, and 4 acres of meadow. There is wood(land) worth 40 swine. T.R.E. it was worth 60 shillings, and afterwards 40 shillings; it is now worth 100 shillings.

### THE LAND OF GISLEBERT DE BRETEVILLE

#### IN ANDOVRE HUNDRET

XLIII. GISLEBERT' de Breteville holds 4 hides and 3 virgates in CEREWARTONE [Cholderton in Ampport] of the King, and Ralf (holds them) of him. Four freemen held them, as 4 manors, as an alod (*in alodium*) of king Edward. It then, as now, paid geld for 4 hides and 3 virgates. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 2 bordars with 1 plough. There are two serfs and 3 acres of meadow. T.R.E. it was worth 67 shillings and 6 pence, and afterwards 40 shillings; it is now worth 60 shillings.

#### IN BROCTON<sup>2</sup> HUNDRET

The same Gislebert holds DENEGRIGE [Dunbridge in Mottisfont]. Chening held it as an alod (*in alodium*) of king Edward as 1 manor. It then, as now, paid geld for 1 hide. There are 2 villeins with 1 plough, and 3 acres of meadow, and wood(land) worth 2 swine. T.R.E., and afterwards, it was, as now, worth 25 shillings and 2 pence.

The same Gislebert holds TIDERLEI [Tytherley], and Papald' (holds it) of him. Chening held it as an alod (*in alodium*) of king

Edward as a manor. It then, as now, paid geld for 1 hide. There is land for 1 plough. In (the) demense is half a plough; and (there are) 2 villeins and 1 bordar with 1 plough. It is worth 10 shillings.

#### IN HOLESETE<sup>3</sup> HUNDRET

The same Gislebert holds BROMESELLE [Great Bramshill in Eversley], with the king's manor (of) SUALEFELLE [Swallowfield], which is in Berchesire (Berkshire).<sup>4</sup> Alwi and Elsi held (it) as an alod (*in alodium*) of king Edward as 2 manors. Then, as now, it paid geld for 2 hides less 1 virgate. There is land for 2 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 villeins with 1 plough, and a mill worth 25 pence, and 6 acres of meadow. There is wood(land) worth 2 swine. T.R.E. it was worth 40 shillings, and afterwards 20 shillings and 5 pence; it is now worth 25 pence. This manor (of Bramshill), as the Hundred says, never belonged to the King's manor (of Swallowfield).

The same Gislebert holds STRADFELLE [Stratfield] with the (above) king's manor (of) Sualefelle [Swallowfield]; but the Hundred says that it never belonged thereto (*ibi*). Edward held it of king Edward as an alod (*in alodium*). It then paid geld for 1 hide; now it does not pay geld. There is land for 2 ploughs. There are 2 villeins. Hugh holds it of Gislebert, and pays 15 shillings.

#### IN SUMBURNE<sup>5</sup> HUNDRET

The same Gislebert holds 1 hide of the King, which Alnod held of king Edward. It was then, as now, assessed at 1 hide. There is land for 2 ploughs. There are 3 villeins and 6 bordars with 4 ploughs, and a mill worth 20 shillings, and 12 acres of meadow. There is wood(land) worth 10 swine. T.R.E. and afterwards it was, as now, worth 60 shillings. Hugh de Port claims this hide, and says that it belongs to his manors of Cerdeford [Chardford] and Eschetune [ ], and his predecessors held it with them (*ibi*); and the whole Hundred (court) so testifies.

<sup>3</sup> Holdshott.

<sup>4</sup> This is an obscure entry. Swallowfield appears as 'Soanesfelt' (fo. 57) and 'Solafel' (fo. 58) in the Berkshire survey. It had been held by 'Sexi' T.R.E., and the King held it in 1086, but there is nothing there to connect it with Gilbert de Breteville.

<sup>5</sup> King's Sombourne.

<sup>1</sup> Alias Letley.

<sup>2</sup> Thorngate.

# A HISTORY OF HAMPSHIRE

## THE LAND BELONGING TO HUGH THE SON OF BALDRI

### IN MANTESBERG<sup>1</sup> HUNDRET

XLIV. Hugh the son of Baldri holds ICENE [Itchen Abbess] of the King. This manor was held by the abbey of nuns of St. Mary's, Winchester, T.R.E. It was then assessed at 12 hides; now at 3½ hides. There is land for 3 (*sic*) ploughs. In (the) demesne are 4 ploughs; and (there are) 9 villeins and 9 bordars with 3 ploughs. There are 16 serfs, and a mill worth 20 shillings, and 24 acres of meadow. T.R.E. it was worth 15 pounds, and afterwards 17 pounds. It is now worth 11 pounds. The abbess of St. Mary's claims this manor; and the whole Hundred, and also the county court (*vicecomitatus*), bears witness that it was the abbey's (*in abbacia*), T.R.E. and in the time of king William, and ought of right (*juste*) to be. [King William has restored it (*reddidit*) to the abbey.]<sup>2</sup>

### IN CILLEI<sup>3</sup> HUNDRET

The same Hugh holds ACLEI [(Church) Oakley]. Bundi held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 1½ hides. There is 1 villein and 1 bordar. T.R.E., and afterwards, it was worth 15 shillings; now 20 shillings.

### IN HOLESETE<sup>4</sup> HUNDRET

The same Hugh holds STRADFELLE [Stratfieldsaye]. [4 hides are here seized (*occupatæ*) to the prejudice of the King (*super regem*).]<sup>5</sup> Bundi held it of king Edward as an alod (*in alodium*). It then paid geld for 15 hides; now for 7½ hides. There is land for 17 ploughs. In (the) demesne are 2 ploughs; and (there are) 30 villeins and 10 bordars with 16 ploughs. There are a church, and 14 serfs, and 2 mills worth 27 shillings and 6 pence, and 40 acres of meadow. There is wood(land) worth 100 swine, and 1 haw (*haga*) in Winestre. T.R.E. it was worth 15 pounds, and afterwards 12 pounds; now 15 pounds.

### IN ODINGETONE HUNDRET<sup>6</sup>

The same Hugh holds WERGEBORNE [Warnborough], and Guy<sup>7</sup> (holds it) of him

with his daughter. Bondi held it of king Edward. It was then assessed at 11 hides; now at 6 hides. There is land for 12 ploughs. In (the) demesne are 2 ploughs; and (there are) 15 villeins and 16 bordars with 6 ploughs. There are a church, and 3 serfs, and a mill worth 10 shillings, and 12 acres of meadow. T.R.E. it was worth 12 pounds, and afterwards 6 pounds; now 10 pounds.<sup>8</sup>

## THE LAND OF WALERAN THE HUNTSMAN

### IN SIRLEI HUNDRET<sup>9</sup>

XLV. WALERAN holds WERINGETONE [Winkton in Christchurch] of the King, and Robert (holds it) of him. Earl Tosti(g) held it of king Edward as an alod (*in alodium*). It then paid geld for 7 hides; now for 3 hides and 1 virgate. There is land for 4 ploughs. In (the) demesne are 1½ ploughs; and (there are) 14 villeins and 7 bordars with 4 ploughs. There are 2 mills for (the use of the) hall, and 450 eels (come) from the mill; and (there are) 55 acres of meadow. T.R.E. it was worth 10 pounds, and afterwards 7 pounds; now 4 pounds and 10 shillings. Of this manor the King has 1 hide and half a virgate, and all the wood(land) in his forest. This is appraised at 110 shillings; and of the remainder the King gave 1 virgate of land to a certain priest.

### IN FORDINGEBRIGE HUNDRET

The same Waleran holds 1½ virgates in Otoiche [Outwich],<sup>10</sup> and Gozelin holds (it) of Waleran. Agemund held it of king Edward as an alod (*in alodium*); and it belonged to Welle [ ], as the (jurors of the) Hundred and the shire say. There is land for half a plough, which is there, with 1 villein and 1 bordar, and 3 acres of meadow, and a small wood. It was worth 10 shillings; now 5 shillings.

### IN ANDOVRE HUNDRET

The same Waleran holds FULDESCOTE [Foxcot], and Ralf (holds it) of him. Two freemen held it as an alod (*in alodium*) of king Edward as 2 manors. Then, as now, it paid geld for 3 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 10 villeins and 13 bordars with 4 ploughs.

<sup>1</sup> Bountisborough.

<sup>2</sup> A marginal note. <sup>3</sup> Chutely.

<sup>4</sup> Holdshott.

<sup>5</sup> Marginal note.

<sup>6</sup> Now in Bermondspitt Hundred.

<sup>7</sup> Guy de Craon. See Introduction.

<sup>8</sup> See Introduction for this manor and entry.

<sup>9</sup> In Christchurch Hundred.

<sup>10</sup> In Breamore.



## THE HOLDERS OF LANDS

There are 3 serfs. T.R.E. it was worth 50 shillings, and afterwards 40 shillings; now 70 shillings.

Waleran holds 1 virgate in SORESDENE [Sarson in Amport]; and Ralf (holds it) of him. Godric held it as an alod (*in alodium*) of king Edward as a manor. Then, as now, it paid geld for 1 virgate. There is land for 3 ploughs. It was, as now, worth 5 shillings.

### IN BROCTON<sup>1</sup> HUNDRET

The same Waleran holds DENE [East Dean]. Manno held it of king Edward. Then, as now, it paid geld for 1 virgate. There is land for half a plough, and it is there with 1 villein and 1 bordar. There are 4 acres of meadow, and 2 serfs. There is wood(land) for the fences. T.R.E. it was worth 10 shillings; and afterwards, as now, 5 shillings. This land does not belong to (*adjacet*) any manor of his.

fo. 48b.

The same Waleran holds DENE [Dean]. Boda held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 2 hides and 1 virgate. There is land for 3 ploughs. In (the) demense is 1 plough; and (there are) 11 bordars with 2 ploughs, and a mill worth 20 shillings (per annum), and 4 acres of meadow. There is wood(land) for the fences. T.R.E. it was worth 4 pounds, and afterwards 60 shillings; now 40 shillings.

The same Waleran holds TIDERLEI [Tytherley], and Roger (holds it) of him. Alvrice held it as an alod (*in alodium*) of king Edward as a manor. Then, as now, it paid geld for 1 hide. There is land for 1 plough, which is there in (the) demesne, and (there are) 4 bordars. It is worth 10 shillings.

### IN SUMBURNE<sup>2</sup> HUNDRET

The same Waleran holds SUMBURNE (King's Sombourn), and Roger (holds it) of him. Ednod held it of king Edward. It was then, as now, assessed at 1½ hides. There is land for 1 plough. There are 2 villeins with half a plough, and 18 acres of meadow. T.R.E., and afterwards, it was worth 30 shillings; now 20 shillings.

[Waleran holds 1 hide in the said Sumburne [King's Sombourn], and Roger (holds it) of him. Mainard held it of king Edward. There is land for 1½ ploughs, and (there are)

3 bordars and 6 acres of meadow. T.R.E. it was worth 30 shillings, and afterwards 20 shillings; now 10 shillings.]<sup>3</sup>

## THE LAND OF WALTER SON OF OTHER<sup>4</sup>

### IN NETEHAM<sup>5</sup> HUNDRET

XLVI. WALTER son of Other holds WILDEHEL [Willhall<sup>6</sup> in Alton]. Ocsen held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 1 hide. There is land for 1½ ploughs; 1 plough is there (in demesne), and (there are) 6 bordars with half a plough. There are a church and 1½ acres of meadow. It is worth 40 shillings.

### IN CILLEI<sup>7</sup> HUNDRET

The same Walter holds GERLEI [ ].<sup>8</sup> Ocsen held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 3 hides. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 6 bordars with 1 plough and 1 serf. There is wood(land) for the fences. T.R.E., and afterwards, it was worth 30 shillings; now 40 shillings.

## THE LAND OF WALTER SON OF ROGER

### IN BERTUN<sup>9</sup> HUNDRET

XLVII. WALTER son of Roger [de Pistes]<sup>10</sup> holds half a hide in BERTUNE [Barton Stacey]; and Hugh [de Port]<sup>11</sup> (holds it) of him. Ezi the sheriff held it of king Edward. It was then, as now, assessed at half a hide. There is a church; and it (the manor) is worth 15 shillings.

### IN BROCTON<sup>12</sup> HUNDRET

The same Walter holds DENE [Dean], and Herbert (holds it) of him. Ulstan held

<sup>3</sup> This is a marginal entry. See Introduction.

<sup>4</sup> The ancestor of the baronial Windsors and the Fitz Gerald.

<sup>5</sup> Alton and Selbourne.

<sup>6</sup> A property in the parish.

<sup>7</sup> Chutely.

<sup>8</sup> This place should be close to Deane and Church Oakley. The name seems now lost.

<sup>9</sup> Barton Stacey.

<sup>10</sup> i.e. of Pitres. See Introduction.

<sup>11</sup> Interlined. <sup>12</sup> Thorngate.

<sup>1</sup> Thorngate. <sup>2</sup> King's Sombourne.

# A HISTORY OF HAMPSHIRE

it as an alod (*in alodium*) of king Edward as 1 manor. Then, as now, it paid geld for half a hide. There is land for 1 plough. There are 2 bordars with half a plough. T.R.E., and afterwards it was, as now, worth 7 shillings; but it is farmed at (*reddit de firma*) 15 shillings.

## IN NETEHAM<sup>1</sup> HUNDRET

Walter the son of Roger holds LESBORNE<sup>2</sup> [ ], and Herbert<sup>3</sup> holds it under him. Alward held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 4 hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 2 bordars with 2 ploughs, and 2 serfs, and 1 acre of meadow. There is wood(land) worth 3 swine. T.R.E. it was worth 60 shillings, and afterwards 40 shillings; now 70 shillings.<sup>4</sup>

## THE LAND OF WILLIAM SON OF MANNE

### IN BERTUN<sup>5</sup> HUNDRET

XLVIII. WILLIAM son of Manne holds 1 hide in NIWETONE [Newton Stacey].<sup>6</sup> Alvrice held it of king Edward. It was then (assessed at) 1 hide; now at nothing. One plough is there in demesne; and it is farmed (*data ad firmam*) at 20 shillings, and is worth that sum. William received this land with his wife.

## THE LAND OF WILLIAM ALIS

### IN MANEBRIGE<sup>7</sup> HUNDRET

XLIX. WILLIAM Alisius holds ELLATUNE [Allington in South Stoneham].<sup>8</sup> Godman held it of king Edward. It was then, as now, assessed at 3 hides. There is land for 5 ploughs. In (the) demesne is 1 plough; and (there are) 11 villeins and 6 bordars with 7

<sup>1</sup> Alton and Selbourne.

<sup>2</sup> Not identified by Mr. Moody. One can only suggest that it is possibly an error for Selesborne (Selbourne).

<sup>3</sup> Altered, by subpunctuation, from 'Hunger.'

<sup>4</sup> This entry is made separately at the foot of the folio.

<sup>5</sup> Barton Stacey.

<sup>6</sup> In Barton Stacey.

<sup>7</sup> Mansbridge.

<sup>8</sup> This is Mr. Moody's identification. I can find no such place in the Ordnance map, but it was a tything there.

ploughs. There are a church and 10 serfs, and 2 mills worth 20 shillings, and 67 acres of meadow, and 30 pence (are paid) for the pasture (*herbage*). There is wood(land) worth 20 swine. T.R.E. it was worth 15 pounds, and afterwards 7 pounds; now 6 pounds 10 shillings.

## THE LAND OF WILLIAM SON OF BADERON<sup>9</sup>

### IN CLERE<sup>10</sup> HUNDRET

L. WILLIAM son of Baderon holds CLERE [in Clere]. Sexi held it of king Edward. It was then assessed at 4 hides; it is now assessed at 3 hides and 2½ virgates. There is land for 7 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 16 bordars with 5 ploughs. There are 1 serf, and 3 mills worth 7 shillings and 6 pence, and 7 acres of meadow. T.R.E., and afterwards, it was, as now, worth 7 pounds; but it pays 10 pounds.

### IN ANDOVRE HUNDRET

The same William holds CEREWARTONE [Cholderton in Amport]. Three freemen held it of king Edward as an alod (*in alodium*). It then paid geld for 3 hides and 2½ virgates; now for 1 hide and 2½ virgates. There is land . . . In (the) demesne is 1 plough; and (there are) 4 bordars and 2 serfs, and 5½ acres of meadow. T.R.E. it was worth 4 pounds and 10 shillings; it was afterwards, as now, worth 65 shillings.

## THE LAND OF WILLIAM SON OF STUR<sup>11</sup>

### IN SIRLEI HUNDRET<sup>12</sup>

LI. WILLIAM son of Stur holds SOPELIE [Sopley]. Edrice held it of king Edward as an alod (*in alodium*). It then paid geld for 7 hides; now for 1 hide and half a virgate. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 3 villeins and 6 bordars with 2 ploughs. There are 1 serf, and a mill worth 10 shillings, and 875 eels, and 59 acres of meadow. T.R.E. it was worth 10 pounds, and afterwards 40 shillings; (it is) now (worth) 50 shillings; but it pays

<sup>9</sup> Ancestor of the baronial Monmouths.

<sup>10</sup> Kingsclere.

<sup>11</sup> Of the Isle of Wight. See below.

<sup>12</sup> In Christchurch Hundred.



## THE HOLDERS OF LANDS

100 shillings. The King has 4 hides of this manor, and all the woodland (*nemus*) in his forest. The whole of this is worth 110 shillings.

### IN SUMBURNE <sup>1</sup> HUNDRET

The same William holds 1 hide, and Hugh (holds it) of him. Odo held it of king Edward. It was then, and is now, assessed at 1 hide. There is land for 1 plough, which is in (the) demesne with 4 villeins. There are 10 acres of meadow. T.R.E., and afterwards, it was worth 20 shillings; (it is) now (worth) 25 shillings.

### [THE LAND] OF WILLIAM BELET

LII. WILLIAM Belet holds ODECOTE [Woodcot], and Faderlin (holds it) of him with his daughter. Ansfrid held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 1½ ploughs. In (the) demesne is 1 plough with 7 bordars; and (there are) 1 serf, and 2 acres of meadow. T.R.E. it was worth 20 shillings; it was afterwards, as now, worth 30 shillings.

### THE LAND OF WILLIAM THE ARCHER <sup>2</sup>

#### IN BROCTON <sup>3</sup> HUNDRET

LIII. WILLIAM the archer holds BENECLIE [Bentley].<sup>4</sup> Alwi held it, as 1 manor, as an alod (*in alodium*) of king Edward. Then, as now, it paid geld for half a hide. There is land for 1 plough, which is in (the) demesne; and (there are) 6 bordars with 1 plough. T.R.E. it was worth 10 shillings; it was afterwards, and is now, worth 12 shillings and 6 pence.

#### IN SUMBURNE <sup>5</sup> HUNDRET

The same William holds CUNTUNE [Compton].<sup>6</sup> Five thegns held it of king Edward, and could betake themselves (*ire*) where they would. It was then assessed at 4½ hides; now at 3 hides. There is land for 7 ploughs. In (the) demesne is 1 plough; and (there are)

13 villeins and 19 bordars with 7 ploughs. There is a mill worth 20 shillings, and (there are) 8 acres of meadow. T.R.E., and afterwards, it was worth 4 pounds; (it is) now (worth) 7 pounds.

Ældred, Ode's brother, claims 1 virgate of land of (*de*) this manor, and says that he held it the day on which king Edward was quick and dead, and was deprived of it after king William had crossed the sea; and that he proved (his claim) before the Queen. Hugh de Port and the men of the whole Hundred bear witness to this fact.

### THE LAND OF HERBERT THE SON OF REMI

#### IN SUMBURNE <sup>7</sup> HUNDRET

LIV. HERBERT the son of Remi (*Remigii*) holds FERLEGE [Farley Chamberlain]. Alwin and Ulwin held it of the King. It was then assessed at 5 hides; now at 1 hide. There is land for 8 ploughs. In (the) demesne are 3 ploughs; and (there are) 7 villeins and 4 bordars with 4 ploughs. There are 6 serfs. T.R.E., and afterwards, it was worth 60 shillings; it is now worth 100 shillings.

The same Herbert holds FERLEGE [Farley Chamberlain]. Norman held it of king Edward. It was then assessed at half a hide; now at nothing. There is land <sup>8</sup> . . . There are 3 bordars and 1 villein with half a plough. It was, and is now, worth 20 shillings. William de Ow claims this hide, and says that it belongs to his manor. But the men of the Hundred do not bear witness that he ought to have it; (they think), on the contrary, that it was taken from the king (*præoccupatam esse super regem*).

### THE LAND OF H[ERBERT] THE CHAMBERLAIN

#### IN NETEHAM <sup>9</sup> HUNDRET

LV. HERBERT the chamberlain holds LARODE [Larode]<sup>10</sup> of the King. Brictric held it of king Edward. There are 1 hide and 1 virgate of land, and it has not paid geld.

<sup>1</sup> King's Sombourne.

<sup>2</sup> Arcuarius.

<sup>3</sup> Thorngate.

<sup>4</sup> A farm in Mottisfont (as I make it). It is 'Benetleg[e]' in the *Testa de Nevill* (temp. Hen. III.). Mr Moody connects it with 'Bentley Wood in Broughton.'

<sup>5</sup> King's Sombourne.

<sup>6</sup> A manor in King's Sombourne.

<sup>7</sup> King's Sombourne.

<sup>8</sup> A blank here in the MS.

<sup>9</sup> Alton and Selbourne.

<sup>10</sup> A farm in West Tisted, belonging to Magdalen College, Oxford. Mr. Moody so identifies it; but I do not find it on the Ordnance map. There is, however, a 'Lye-wood' farm in Ropley just to the north of it.

# A HISTORY OF HAMPSHIRE

There is land for 1 plough. In (the) demesne is 1 plough with 3 bordars, and 1 acre of meadow. There is wood(land) for the fences. T.R.E. (it was), and is now, worth 20 shillings. When received, it was worth 15 shillings.

## IN MENESTOCHES<sup>1</sup> HUNDRET

The same Herbert holds SUDBERTUNE [Soberton] of the King. Alnod held it T.R.E.

fo. 49

It was then assessed at 3 hides; now at 2½ hides, because half a hide of it is in earl Roger's<sup>2</sup> park. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 8 bordars with half a plough. There are a mill worth 10 shillings, and 2 acres of meadow. T.R.E. it was worth 60 shillings, and was afterwards, and is now, worth 40 shillings, because it is diminished (*minoratum*).

## THE LAND OF HENRY THE TREASURER

### IN MENESTOC<sup>3</sup> HUNDRET

LVI. HENRY the treasurer holds SUDBERTUNE [Soberton] of the King. Andrac held it of king Edward, and could betake himself (*ire*) where he would. It was then assessed at 2 hides; now at 1 hide. Earl Roger<sup>4</sup> has (belonging to it) 1 virgate in his park. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 5 bordars with 1 plough. There are 2 serfs, and 2 acres of meadow. T.R.E. it was worth 30 shillings, and afterwards 20 shillings; (it is) now (worth) 60 shillings.

### IN MANEBRIGE<sup>5</sup> HUNDRET

The same Henry holds ESTLEIE [Eastley in South Stoneham]. Godwine held it of king Edward, and could betake himself where he would. It was then assessed at 2 hides; now at 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 7 bordars with 3 ploughs. There are 2 serfs, and 12 acres of meadow. There is wood(land) worth 5 swine. T.R.E., and afterwards, it was, as now, worth 40 shillings.

<sup>1</sup> Meonstoke.

<sup>2</sup> Of Shrewsbury.

<sup>3</sup> Meonstoke.

<sup>4</sup> Of Shrewsbury.

<sup>5</sup> Mansbridge.

## IN BERMESPLET<sup>6</sup> HUNDRET

The same Henry holds NOCLEI [Nutley]. Four freemen held it of king Edward as an alod (*in alodium*). It was then assessed at 5 hides; now at 2½ hides. There is land for 5 ploughs. In (the) demesne are 3 ploughs; and (there are) 4 villeins and 7 bordars with 1½ ploughs. There are 8 serfs. T.R.E. it was worth 100 shillings, and afterwards 60 shillings; it is now worth 4 pounds and 10 shillings. Of this manor Geoffrey marescal holds half a hide, which, as the Hundred affirm, belongs there.<sup>7</sup>

The same Henry has 1 virgate in the same Hundred which pays him 4 shillings; but it does not belong to the said (*non est de ipso*) manor.

## THE LAND OF HUMFREY THE CHAMBERLAIN

### IN BROCTON<sup>8</sup> HUNDRET

LVII. HUMFREY the chamberlain holds PUTELEORDE [Pittlesworth].<sup>9</sup> Ulnod held it of king Edward as an alod (*in alodium*). It then paid geld for 3½ hides; now for 1½ hides. There is land<sup>10</sup> . . . In (the) demesne are 3 ploughs and 2 bordars. T.R.E., and afterwards, it was, as now, worth 60 shillings.

### IN BERTUN<sup>11</sup> HUNDRET

The same Humfrey holds 1 hide in COLEMERE [Colemore]. Alvríc held it of Bundi, and could not betake himself elsewhere (*ire quolibet*). It was then assessed at 1 hide; now at half a hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 4 bordars with 1 plough. There are 4 serfs. T.R.E. it was worth 40 shillings, and afterwards was, as now, worth 30 shillings; but it pays 40 shillings.

## [THE LAND OF] HERBRAND

### IN MANEBRIGE<sup>12</sup> HUNDRET

LVIII. HERBRAND holds BOVIETE [Boyatt in Otterbourne] of the King. Godric held it of king Edward. It was then assessed at 2

<sup>6</sup> Part of Bermondspitt.

<sup>7</sup> Compare *Testa de Nevill*, pp. 233, 237, 238, 242. And see 'Beneclei' above for a similar form.

<sup>8</sup> Thorngate.

<sup>9</sup> In Broughton.

<sup>10</sup> A blank here in the MS.

<sup>11</sup> Barton Stacey.

<sup>12</sup> Mansbridge.



## THE HOLDERS OF LANDS

hides ; now at half a hide. There is land for 2 ploughs. In (the) demesne is 1 plough ; and (there are) 1 villein and 8 bordars with half a plough. There are 2 serfs, and 2 mills worth 16 shillings, and 45 acres of meadow. There is wood(land) worth 1 pig. T.R.E. it was worth 4 pounds ; it was afterwards, as now, worth 40 shillings.

### [THE LAND] OF RAINALD CROCH

IN MANESBRIGE<sup>1</sup> HUNDRET

LIX. RAINALD the son of Croch holds 1 hide of the King in OLVESTUNE [Woolston in St. Mary extra]. Tovi held it of king Edward. It was then assessed at 1 hide ; it is now assessed at half a virgate. There are 3 villeins and 3 bordars with 1 plough. It was worth 10 shillings ; it is now worth 5 shillings.

### THE LAND OF CROCH THE HUNTSMAN

IN ANDOVRE HUNDRET

LX. CROC holds 2 hides of the King in TODEORDE [South Tidworth]. Alwin held it, as a manor, of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 2 hides. There is land for 1 plough, which is in (the) demesne, with 1 bordar and 1 serf. T.R.E. it was worth 40 shillings, and afterwards 20 shillings ; (it is) now (worth) 30 shillings.

IN ESSEBORN<sup>2</sup> HUNDRET

The same Croch holds ESTUNE [Crux Easton]. Linxi held it of king Edward in parage (*in paragio*). It was then assessed at 6 hides ; now at 3 hides and half a virgate. There is land for 5 ploughs. In (the) demesne are 2 ploughs ; and (there are) 7 villeins and 10 bordars with 2 ploughs. There are a church and 20 acres of meadow. There is wood(land) for fences. T.R.E. it was worth 6 pounds, and afterwards 3 pounds ; (it is) now (worth) 6 pounds.

### THE LAND OF GOZELIN DE CORMEL

IN ANDOVRE HUNDRET

LXI. GOZELIN de Cormelies holds ANNE [Thruxton ?] of the King. Saxi held it, as

a manor, of king Edward as an alod (*in alodium*). It then paid geld for 10 hides ; now for 4½ hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs ; and (there are) 4 villeins and 8 bordars with 3 ploughs. There are 4 serfs and 4 acres of meadow. There is wood(land) worth 5 swine. The abbey of Cormelies (*Cormelies*) holds the church of this manor, together with 1 virgate of land, and has there 1 villein. The whole manor was worth T.R.E. 13 pounds ; and afterwards, as now, 10 pounds.

### THE LAND OF GEOFFREY MARESCAL

IN NETEHAM<sup>3</sup> HUNDRET

LXII. GEOFFREY Marescal holds HIBESETE [Empshott] of the King. Bundi and Saxi held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at half a hide. There is land for 1 plough. There are 4 villeins with 1½ ploughs, and a mill worth 50 pence, and half an acre of meadow. There is wood(land) worth 1 pig. T.R.E., and afterwards, it was worth 20 shillings ; (it is) now (worth) 25 shillings.

The same Geoffrey holds WERILDEHAM [(East) Worldham]. Alwin held it of king Edward as an alod (*in alodium*). It was then assessed at 5 virgates of land ; now at 1 virgate. There is land for 1 plough. In (the) demesne are 2 ploughs ; and (there are) 2 villeins and 12 bordars with 1½ ploughs, and a mill worth 6 shillings and 8 pence, and 10 acres of meadow. T.R.E., and afterwards, it was worth 20 shillings ; (it is) now (worth) 40 shillings.

### THE LAND OF NIGEL THE PHYSICIAN

IN NETEHAM<sup>4</sup> HUNDRET

LXIII. NIGEL the physician holds BRO-CHESEVE<sup>5</sup> [ ] of the King. Spirites held it of king Edward, as an alod (*in alodium*). It was then, as now, assessed at 1 hide. There is land for 1 plough, which is in (the) demesne ; and (there are) 4 villeins and 3 bordars with 2 ploughs. There are 3 serfs, and a mill worth 5 shillings, and 6 acres of meadow. There is wood(land) worth 50 swine ; it is worth 30 shillings.

<sup>3</sup> Alton and Selbourne.

<sup>4</sup> Alton and Selbourne.

<sup>5</sup> There is a 'Brockham' farm in Holybourne.

<sup>1</sup> Mansbridge.

<sup>2</sup> Pastrow.

# A HISTORY OF HAMPSHIRE

## THE LAND OF ALVRED THE PRIEST

### IN CLERE<sup>1</sup> HUNDRET

LXIII. ALVRED the priest holds ULVRETUNE [Wolverton] and Finlei<sup>2</sup> [Finley] of the King. Elveva held it of the King (Edward), and could betake herself anywhere (*ire quolibet*). It was then, as now, assessed at 5 hides. There is land for 8 ploughs. In (the) demesne is 1 plough; and (there are) 7 villeins and 17 bordars with 5 ploughs. T.R.E., and afterwards, it was worth 6 pounds; (it is) now (worth) 100 shillings.

### IN TICEFEL<sup>3</sup> HUNDRET

The same Alvred holds 1 hide, which Ulvret held of the King. It is now a berewick of Ulvretune [Wolverton].<sup>4</sup> It was then, and is now, assessed at 1 hide. There is land for 1 plough. There are 3 villeins with half a plough, and wood(land) worth 5 swine. It is worth 20 shillings.

## THE LAND OF DURAND THE BARBER

### IN TICEFEL HUNDRET

LXV. DURAND the barber holds 1 hide of the King, which Blacheman held of king Edward. It was then assessed at 1 hide; now at 1 virgate. There is land for 1 plough, which is in (the) demesne; and (there are) 2 villeins and 4 bordars with half a plough. T.R.E. it was worth 20 shillings, and afterwards 15 shillings; (it is) now (worth) 25 shillings.

## [THE LAND] OF RANNULF FLAMME<sup>5</sup>

### IN TICEFEL HUNDRET

LXVI. RANNULF Flamme holds FUNTELEI [Funtley in Titchfield]. Turi held it of earl Godwine. It was then, as now, assessed at 1 hide; but there is 1 virgate of land more. There is land for 3 ploughs. In (the) de-

mesne is 1 plough; and (there are) 4 villeins and 5 bordars with 2½ ploughs. There are 1 serf, and a mill worth 12 shillings and 6 pence, and 5 acres of meadow. There is wood(land) worth 10 swine. T.R.E. it was worth 4 pounds; it was afterwards, as now, worth 3 pounds.

## [THE LAND] OF GEOFFREY THE CHAMBERLAIN<sup>6</sup>

### IN BASINGESTOC HUNDRET

LXVII. GEOFFREY, chamberlain to the King's daughter, holds HECHE [Hatch Warren]<sup>7</sup> of the King. Alsi held it T.R.E. It was then assessed at 1 hide; now at 3 virgates. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins with 1 plough. There are a church and 11 serfs. T.R.E. it was worth 100 shillings; it was afterwards, as now, worth 4 pounds. Ode de Wincestre claims this hide, and says that he had it in (mort)gage for 10 pounds, from (*de*) Alsi, with the permission of king William, and that he is therefore deprived of it unjustly. But Geoffrey holds it of the King, for the service he performed to his daughter Mathilda.

fo. 49b.

### IN EFEDEL HUNDRET<sup>8</sup>

LXVIII. HUGH with the beard (*Barbatus*), holds ORMERESFELT [Dogmersfield] of the King. Suein held it of king Edward as an alod (*in alodium*). It was then assessed at 5 hides; now at nothing. There is land for 6 ploughs. In (the) demesne is 1 plough; and (there are) 10 villeins and 8 bordars with 3 ploughs. There are a church, and 1 serf, and a mill worth 6 shillings and 6 pence, and 5 acres of meadow. There is wood(land) worth 100 swine. It is worth 100 shillings.

### IN SUMBURN<sup>9</sup> HUNDRET

HUGH the son of Osmund holds STOCHE [Stockbridge?] of the King. Edward held it of king Edward. It was then assessed at 1 hide; now at nothing. There is land for 1 plough, which is in (the) demesne, with 2 serfs. It was, and is now, worth 20 shillings.

<sup>1</sup> Kingsclere.

<sup>2</sup> 'et Finlei' interlined. I do not find the place on the map or in the *Nomina Villarum* of 1316. The identification is Mr. Moody's.

<sup>3</sup> Titchfield.

<sup>4</sup> The position of this 'berewick' at the other end of the county should be noted

<sup>5</sup> This heading is marginal.

<sup>6</sup> This heading is marginal.

<sup>7</sup> A detached portion of Cliddesden. Mr. Moody placed it in Farleigh Wallop.

<sup>8</sup> In Odiham Hundred.

<sup>9</sup> King's Sombourne.



# THE HOLDERS OF LANDS

## IN SUMBURN<sup>1</sup> HUNDRET

ANSCHITIL the son of Osmund holds HOLSTUNE [Houghton] of the King. Godwine held it of king Edward. It was then assessed at 2½ hides; now at half a hide. There is land for 2 ploughs, which are in (the) demesne, with 4 bordars and 10 serfs. T.R.E. it was worth 60 shillings, and afterwards 20 shillings; it is now worth 50 shillings.

## IN RODBRIGE<sup>2</sup> HUNDRET

The same Anschitil holds 1 virgate of the King in NORTHAM [ ]. Ezi held it of king Edward, and it belonged to (*fuit de*) the King's 'farm,' and in his time it was alienated (*missa foris*); but (the jurors of) the Hundred know not how. It was then, as now, assessed at 1 virgate. It is worth 15 shillings.

## IN PORTESDON<sup>3</sup> HUNDRET

The same Anschitil<sup>4</sup> holds COSEHAM [Cosham] of the King. Bricsmar held it of king Edward as an alod (*in alodium*). It then paid geld for 2 hides; now for half a hide. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 6 bordars and 1 serf, and a salt pan worth 14 pence. Of this manor one of his men holds 1 virgate, and there he has 1 plough. T.R.E. it [the manor] was worth 40 shillings, afterwards 30 shillings; (it is) now (worth) 50 shillings.

The same Anschitil holds half a hide of the King, which Norman held of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a hide. There is land for 1 plough, which is in (the) demesne; and (there are) 2 villeins and 3 bordars, and 3 serfs with 1 plough and half an acre of meadow. T.R.E., and now, (worth) 40 shillings. When received, (it was worth) 30 shillings.

## IN ESSELEI<sup>5</sup> HUNDRET

MILO the porter holds BRONDENE [Bramdean]<sup>6</sup> of the King. Two freemen held it,

as 3 manors, of king Edward. It then paid geld for 1 hide and 2½ virgates; now for nothing. There is land<sup>7</sup> . . . In (the) demesne are 1½ ploughs; and (there are) 4 villeins and 6 bordars with 1 plough, and 5 acres of meadow; and a haw (*baga*) in Winchester worth 3 shillings. T.R.E. it was worth 60 shillings, and afterwards 40 shillings; it is now worth 50 shillings.

## IN BERMESPLET<sup>8</sup> HUNDRET

The same Milo holds 2½ virgates<sup>9</sup> of the King. Two freemen held them, as 2 manors, of king Edward. There is land for half a plough (which is in demesne) with 2 villeins. It was, and is now, worth 5 shillings.

## IN HOLESETE<sup>10</sup> HUNDRET

AUBREY (*Albericus*) the chamberlain holds HARLEI [Hartley Westpall] of the King. Alvrice held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1½ hides. There is land . . . There are 4 villeins with 3 ploughs, and 1 serf, and a mill worth 3 shillings, and 6 acres of meadow. There is wood(land) worth 5 swine. T.R.E., and afterwards, it was, as now, worth 40 shillings; but it pays 45 shillings.

## IN ANDOVRE HUNDRET

ROBERT the son of Murdac holds CEREWARTONE [Cholderton in Amport] of the King. Two freemen held it, as 2 manors, as an alod (*in alodium*) of king Edward. It then paid geld for 3 hides and 1 virgate, and 1½ acres; now for 2 hides and the fourth part of a virgate. There is land for 2 ploughs. In (the) demesne is half a plough; and (there are) 2 villeins and 2 bordars with half a plough. There are 2 serfs, and 1½ acres of meadow. T.R.E. it was worth 60 shillings, and afterwards 30 shillings; (it is) now (worth) 40 shillings.

## IN FORDINGEBRIG HUNDRET

OSBERN the falconer (*accipitrarius*) holds GERLEI [Goreley]<sup>11</sup> of the King. Wistrinc held it of the King as an alod (*in alodium*). It was then, as now, assessed at 1 hide. There is land.<sup>12</sup> . . . There are 3 villeins and

<sup>1</sup> King's Sombourne.

<sup>2</sup> Redbridge.

<sup>3</sup> Portsdown.

<sup>4</sup> The scribe first wrote 'Anschitil' with a blank after it, as if it were a fresh tenant; but he afterwards prefixed 'Idem.'

<sup>5</sup> Bishop's Sutton.

<sup>6</sup> Woodcott in Bramdean according to Inq. p. m. of 36 Ed. III.

<sup>7</sup> A blank here in the MS.

<sup>8</sup> Bermondspitt

<sup>9</sup> Apparently in 'Candover' and 'Hatang' (*Testa de Nevill*).

<sup>10</sup> Holdshott.

<sup>11</sup> In Fordingbridge or Ibsley.

<sup>12</sup> A blank in the MS.

# A HISTORY OF HAMPSHIRE

2 bordars with 1 plough and 7 acres of meadow. It was worth 20 shillings; (it is now (worth) 10 shillings. One half of this hide is in the forest, and is worth 7 shillings.

## THE LAND OF THE KING'S THEGNS<sup>1</sup>

### IN BERTUNE<sup>2</sup> HUNDRET

LXIX. ODE<sup>3</sup> holds SUDTUNE [Sutton Scotney] of the King. Alward held it of earl Godwine. It was then assessed at 5 hides; now at 2 hides and 3 virgates. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 4 bordars with 2 ploughs. There are a church, and 8 serfs, and a mill worth 6 shillings and 3 pence, and 10 acres of meadow. T.R.E. it was worth 6 pounds, and afterwards 4 pounds; (it is) now (worth) 100 shillings.

The same Ode holds NORTUNE [Norton].<sup>4</sup> Fulchi held it of king Edward, and could betake himself (*ire*) where he would. It was then assessed at 5 hides; now at 2 hides and 1 virgate. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 3 villeins and 5 bordars with 1 plough. There are a church, and 6 serfs, and a mill worth 15 shillings, and 10 acres of meadow. The pasture produces 12 pence, and (there are) 5 haws (*hagæ*) in Wincestre [Winchester] worth 10 shillings. T.R.E. it was worth 6 pounds, and afterwards 3 pounds; (it is) now (worth) 6 pounds 10 shillings.

### IN ESSELEI<sup>5</sup> HUNDRET

The same Ode holds BIONDENE [Bramdean?]. Lewin held it of king Edward as an alod (*in alodium*). It was then, and is now, assessed at 1 hide and 1 virgate. There is land for 1 plough, which is in (the) demesne, with 3 bordars and 3 acres of meadow. There is wood(land) for (the) fences. T.R.E. it was, as now, worth 40 shillings. When received, it was worth 5 shillings.

### IN NETEHAM<sup>6</sup> HUNDRET

EDWIN holds ACANGRE [Oakhanger in Selbourn], and says that he bought it of king William; but (the jury of) the shire knows nothing of this. Alwi held it of king Edward; and Richard now holds (it) of Edwin. T.R.E. it was assessed at 1 hide and 1 virgate. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 8 villeins and 6 bordars with 3 ploughs, and 2 serfs and 2 acres of meadow. T.R.E., and afterwards, it was worth 40 shillings; it is now worth 60 shillings. Of this manor the King's reeve claims half a hide for pasture for the King's oxen; but (the jury of) the shire testifies that he cannot have pasture or pannage in (*de*) the King's wood, as he claims, except by authority of (*per*) the sheriff.

### IN EFEELE HUNDRET<sup>7</sup>

GODWINE holds BERCHELEI<sup>8</sup> [? Bartley]. Edwin held it of king Edward as an alod (*in alodium*). It was then assessed at 1½ hides; now at 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins and 4 bordars with 2 ploughs. There are 2 serfs, and a mill worth 20 pence, and 3 acres of meadow. It was, and is now, worth 20 shillings.

### IN BERMESPLET<sup>9</sup> HUNDRET

CHEPING holds CANDEVRE [Preston Candover] of the King. Sberne held it of queen Eddid. It then paid geld for 2½ hides; now at 2 hides. There is land<sup>10</sup> . . . In (the) demesne is 1 plough; and (there are) 3 villeins with 3 oxen in a plough (team) and 1 serf. One Ernulf holds 1 virgate of this land, and there he has half a plough. T.R.E. it was worth 4 pounds, and afterwards 60 shillings; it is now worth 50 shillings. Half a hide was taken from this manor and added to (*missa in*) ODIHAM, says the Hundred.

ODE de Winc[estre] holds DUMMERE [Dummer]; and Hunger (holds it) of him.

<sup>1</sup> It should be observed that in this section the lands are classified, not under holders (as with the tenants-in-chief), but under the Hundreds, in accordance with the original returns. Thus it is that Ode (of Winchester), Alsí son of Brixi, Alsí Berchenistre, etc., occur more than once in the section.

<sup>2</sup> Barton Stacey.

<sup>3</sup> Ode of Winchester. See Introduction.

<sup>4</sup> A farm in Wonston.

<sup>5</sup> Bishop's Sutton.

<sup>6</sup> Alton and Selbourne.

<sup>7</sup> In Odiham Hundred.

<sup>8</sup> This name is now lost; but, as the Hundred of 'Efedele,' 'Hefedele,' or 'Edefel,' comprised the three adjoining parishes of Odiham, Dogmersfield, and Winchfield, I think it possible that Bartley Heath, in Odiham, may preserve it, especially if there has been a confusion between 'c' and 't' by a scribe.

<sup>9</sup> Bermondspitt.

<sup>10</sup> A blank in the MS.



# THE HOLDERS OF LANDS

Auti held it of king Edward. It then, as now, paid geld for 5 hides. There is land for 5 ploughs. In (the) demesne are 3 ploughs; and (there are) 2 villeins and 3 bordars with 1 plough. There are a church and 3 haw (*hagæ*) in Wincestre [Winchester] which pay 2 shillings; and 1 acre of meadow. T.R.E. (it was), as now, worth 100 shillings. When received, it was worth 60 shillings.

EDWIN, the priest, holds 1 virgate in CANDEVRE [Candover] of the King. The same (Edwin) held it of king Edward as an alod (*in alodium*). There is land for half a plough; and yet there is 1 plough in the demesne. It is worth 5 shillings.

## IN HOLESETE<sup>1</sup> HUNDRET

ALSI the son of Brixi holds MATINGELEGE [Mattingley in Heckfield], of the King. Alric held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1½ hides. There is land for 3 ploughs. There are 8 villeins and 3 bordars with 3 ploughs, and a mill worth 5 shillings, and 4 acres of meadow. It was, and is now, worth 30 shillings.

The same AlsI holds MINDESLEI [Minley in Yateley]. Ælwi held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 2 hides. There is land for 1 plough. There are 5 villeins with 2 ploughs. It was, and is now, worth 20 shillings.

ALVRIC holds 2 hides in STRADFELLE [Stratfield]. Godric and Siward held them, as 2 manors, of king Edward as an alod (*in alodium*). This Alvríc has held them till now, without any warranty (*Warrant*). There are 3 villeins with 1 plough, and 2 acres of meadow. There is land for 3 ploughs. T.R.E., as now, it paid geld for 2 hides. T.R.E. it was worth 15 shillings; it was afterwards, and is now, worth 13 shillings and 4 pence.

fo. 50.

The same ALVRIC holds HERLEI [Hartley (Westpall ?)]. Alric held it of king Edward as an alod (*in alodium*). It then paid geld for 1 hide. There is land for 2 ploughs. There are 5 villeins with 2 ploughs, and 6 acres of meadow. There is wood(land) worth 4 swine. It was, and is, worth 15 shillings. The present tenant says that he bought this land of earl William (of Hereford) for 2 marks of gold; but he had never possessed it before.

## IN BERMESPLET<sup>2</sup> HUNDRET

Ednod and Edwi held SUDBERIE [ ] as an alod (*in alodium*) of king Edward, and died after he did. But Cola, a near kinsman of theirs, redeemed this land of earl William (of Hereford). Walter now holds it in pledge (*in vadium*) from the son of Cole of Basinge. It was then, and is now, assessed at 2½ hides. There is land for 3 ploughs. There is 1 villein and 1 bordar. T.R.E. it was worth 40 shillings, and afterwards 10 shillings; (it is) now (worth) 20 shillings.

SIRIC the chamberlain holds FERLEGE [Farleigh Wallop<sup>3</sup>] of the King. Ulveva held it of king Edward. It then paid geld for 4 hides; now for 3 hides. There is land for 8 ploughs. In (the) demesne is 1 plough; and (there are) 15 villeins and 7 bordars with 6 ploughs. There are 3 serfs, and 16 acres of meadow. There is wood(land) for the fences. T.R.E. it was worth 8 pounds, and afterwards 60 shillings; (it is) now (worth) 6 pounds.

## IN BROCTON<sup>4</sup> HUNDRET

OSMUND holds BENECLEGE [Bentley]<sup>5</sup> of the King. The same (Osmund) held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a hide. There is land for 1 plough. There is 1 villein with half a plough. It was, and is now, worth 5 shillings.

ALWI the son of Turber holds TEDERLEG [Tytherley] of the King. Three freemen held it, as 3 manors, of king Edward as an alod (*in alodium*). It then paid geld for 4 hides and 1 virgate; now for 3 hides and 1 virgate. There is land for 6 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 22 bordars with 2 ploughs. There are 7½ acres of meadow, and wood(land) for (the) fences. The whole was worth T.R.E. 50 shillings; and it was afterwards, and is now, worth 40 shillings. The men of the Hundred say that they have never seen the King's seal, or his officer (*legatum*) give seisin of this manor to Alwin Ret,<sup>6</sup> the predecessor of the present tenant; and that, unless the King bear testimony (to his claim), he has

<sup>2</sup> Bermondspitt.

<sup>3</sup> This identity is proved by the *Nomina Villarum* (1316).

<sup>4</sup> Thorngate.

<sup>5</sup> A farm in Mottisfont (as I make it).

<sup>6</sup> 'Ret' is interlined, and it is possible that the scribe meant to alter Alwin into 'Aluret.'

<sup>1</sup> Holdshott.

## A HISTORY OF HAMPSHIRE

nothing there. Two of the former tenants were killed in the battle of Hastings (*de Hastings*).

ALWI the son of Saulf holds TEDERLEG [Tytherley] of the King. His father held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 3 hides. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 2 villeins and 9 bordars with 2 ploughs. There are 2 mills worth 27 shillings and 6 pence, and 26 acres of meadow. There is wood(land) worth 30 swine. It was worth 60 shillings; (it is) now (worth) 40 shillings.

ULVRIC holds LOCHERSLEI [Lockerley] of the King. His father held it, as a manor, of king Edward as an alod (*in alodium*). Then, as now, it paid geld for half a virgate. There is land for 1 plough. In (the) demesne is half a plough, and (there are) 2 bordars with half a plough. It was, and is now, worth 5 shillings.

Four Englishmen hold WALLOPE [Wallop] of the King. Their father held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1 hide. There is land for half a plough, which is there in demesne between them. It was, and is now, worth 10 shillings.

EDMUND holds MULCELTONE [ ] of the King. His father held 1 virgate of king Edward, and another virgate was given him in exchange (*pro excambio*) by Walter Gifard. Sceva held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for half a hide. There is land for 1 plough, which is in demesne with 1 plough. It was, and is now, worth 5 shillings.

ALSI the son of Bixi holds WALLOP [Wallop] of the King. Alric held it, as a manor, of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 2 hides. There is land for 1 plough. There are 4 villeins with 1 plough. T.R.E. (it was), as now, worth 20 shillings; (it was) afterwards 15 shillings.

AGEMUND holds WELEUE [East Wellow] of the King. He himself held it as an alod (*in alodium*) of king Edward. Then, as now, it paid geld for 5 hides. There is land for 3 ploughs. In (the) demesne is 1 plough; and (there are) 10 bordars with 2 ploughs, and 2 mills worth 100 pence, and 12 acres of

meadow. There is wood(land) worth 6 swine. It was worth 60 shillings; (it is) now (worth) 40 shillings.

Waleran took away 1 virgate and a half [West Wellow, Wilts], part of this manor, and put (*misit*) it out of the county, and put it in Wiltesire; and 3 virgates of this land are (now) in the King's forest.

Another AGEMUND holds HOTLOP [ ] of the King. He himself held it, as a manor, of king Edward as an alod (*in alodium*). It then paid geld for 3 hides; now for 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 1 villein and 2 bordars, and 1 serf with half a plough. It was worth 40 shillings; it is now worth 30 shillings.

ALWI holds LOCHERSLEI [Lockerley] of the King. The same (Alwi) held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 virgate. There is land for half a plough, which is in (the) demesne. It was, and is now, worth 30 pence.

EDDULF holds 1 messuage [*masuram*] of the King, in MORTELHUNTE [Mottisfont] as an alod (*in alodium*). His father held it. There is 1 bordar (who) pays 7 pence, and is worth that sum.

### IN ANDOVRE HUNDRET

AGEMUND holds SOTESDENE [Shoddessen in Kimpton] of the King. He himself held it, as a manor, of queen Eddid as an alod (*in alodium*). It then, as now, paid geld for 1 hide. There is land for 1 plough. In (the) demesne is half a plough; and (there is) 1 villein with half a plough. It was worth 15 shillings; it is now worth 10 shillings.

SARIZ holds ETHAM [(Knight's) Enham] of the King. Alwin held it, as a manor, of king Edward as an alod (*in alodium*). Then, as now, it paid geld for  $1\frac{1}{2}$  hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 7 bordars with half a plough, and half a mill worth 5 shillings, and 2 acres of meadow. There is wood(land) worth 2 swine. It was worth 60 shillings; (it is) now (worth) 30 shillings.

ALSI Berchenistre holds ETHAM [(Knight's) Enham] of the King. Ulveva held it of king Edward as an alod (*in alodium*). It then paid geld for  $1\frac{1}{2}$  hides. There is land for 1 plough. In (the) demesne is 1 plough; and



## THE HOLDERS OF LANDS

(there are) 2 villeins and 9 bordars with 1 plough, and half a mill worth 5 shillings; and 2 acres of meadow. There is wood(land) worth 2 swine. It was worth 60 shillings; (it is) now (worth) 30 shillings.

The monks of the bishopric of Winchester<sup>1</sup> have on (*in*) this manor a (mort)gage of 12 pounds, (*xii lib. de vadio*) which a man now dead demised to them.

### IN FORDINGEBRIGE HUNDRET

ALWI the son of Torber holds CERDIFORT [Chadford] of the King. Ulviet<sup>2</sup> held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 14 bordars with 1 plough, and a mill worth 30 pence, and 30 acres of meadow. There is wood(land) worth 6 swine. It was worth 30 shillings; it is now worth 20 shillings.

The same Alwi holds ROCHEBORNE [Rockbourn]. Ulviet held it, as a manor, of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 hide. There is land for 1 plough. There are 5 bordars. It was worth 40 shillings; it is now worth 20 shillings.

(The jurors of) the Hundred say that 1 virgate of this hide, which he claimed<sup>3</sup> was quit and (geld)-free (*soluta*) T.R.E., and that Alwi has king Edward's seal for it.

The same Alwi holds MINGEHAM [Midgham].<sup>4</sup> Ulviet held it of king Edward as an alod (*in alodium*). It then paid geld for 1½ hides; now for nothing. There is land for 1½ ploughs. There are 8 bordars with half a plough. It is worth 13 shillings.

COLA the huntsman<sup>5</sup> holds ADELINGEHAM [Ellingham] of the King. Bolne held it of king Edward as an alod (*in alodium*). It then paid geld for 5½ hides; now for 1½ hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 8 villeins and 7 bordars and 5 serfs with 3½ ploughs, and a mill worth 7 shillings and 6 pence, and 103 acres of meadow. There is wood(land) worth 40 swine. T.R.E., and

afterwards, it was worth 7 pounds; (it is) now (worth) 70 shillings.

Of this manor, 1 hide is in the King's forest, and wood(land) (*unde exibant*) worth 20 swine from the pannage. The whole (of this) is worth 70 shillings.

SAWIN holds half a hide of the King in ROCHEBORNE [Rockbourn]. He himself held it of king Edward as an alod (*in alodium*). It then paid geld for half a hide; now for nothing. There is land<sup>6</sup> . . . In (the) demesne is half a plough with 2 bordars. It was worth 12 shillings and 6 pence; (it is) now (worth) 7 shillings and 6 pence. The sheriff's officers say that this half hide belongs to the King's 'farm' (*firmam*). But the Hundred and the Shire say that king Edward gave it to him (Sawin), who has that King's seal for it.

fo. 50b.

EDDEVA holds MINGEHAM [Midgham in Fordingbridge] of the King. Two freemen held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1½ hides. There is land for 1 plough. There are 4 bordars. It was worth 20 shillings; it is now worth 13 shillings. Picot holds it of Eddeva.

PICOT holds 1 virgate of the King in BORGATE [Burgate in Fordingbridge]. Ulvic and Golleve held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 1 virgate. There is land for half a plough; and it is there with 2 bordars, and a mill worth 8 shillings and 8 pence, and 7 acres of meadow. There is wood(land) without pannage. T.R.E. it was worth 10 shillings, and afterwards 5 shillings; (it is) now (worth) 12 shillings.

### IN SIRLEI HUNDRET<sup>7</sup>

ULVIET the huntsman<sup>8</sup> holds RIPLE [Ripley]

<sup>6</sup> A blank in the MS.

<sup>7</sup> In Christchurch Hundred

<sup>8</sup> This tenant, who had been deprived of his lands in the Isle of Wight (fos. 52, 52b below), is found in Dorset holding a hide at Wimborne (fo. 84), where he is identified by the geld-roll, as a King's thegn. In Wiltshire, he had lost a hide, which king William had given him, in the manor of Chippenham (fo. 64b), but he still held a four-hide estate at Longford (fo. 74), and the geld-roll implies his holding other lands in the county. These entries illustrate at once the importance of a 'huntsman' under Edward, and his chance of gaining William's favour.

<sup>1</sup> i.e. The Old Minster.

<sup>2</sup> It is possible that this was Ulviet the huntsman. See below.

<sup>3</sup> As geld-free, apparently.

<sup>4</sup> In Fordingbridge.

<sup>5</sup> This appears to be the son of Ulviet the huntsman. See p. 509.

## A HISTORY OF HAMPSHIRE

in Sopley] of the King. He himself held it of king Edward as an alod (*in alodium*). It then paid geld for 5 hides; now for 2 hides. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 8 bordars and 4 serfs with 2 ploughs, and 40 acres of meadow.

Of this manor, 3 hides and all the wood are in the King's forest. T.R.E. it was worth 8 pounds; (it is) now (worth) 50 shillings. What is in the forest is worth 100 shillings.

### IN RODBRIGE<sup>1</sup> HUNDRET

AGEMUND holds half a hide of the King in TOTINTONE [Totton in Eling]. He himself held it T.R.E. It was then, as now, assessed at half a hide. There is land for 1½ ploughs. There are 3 bordars and 2 villeins with 1½ ploughs. There are 5 acres of meadow, and the fifth part of a mill worth 5 shillings (a year). It was worth 12 shillings; it is now worth 15 shillings.

ALRIC holds half a hide, which his father held of king Edward; but he did not apply to (*requisivit*) the King after the death of Godric his uncle, who had the custody of it. There is land for 1½ ploughs. It was then, as now, assessed at half a hide. There are 2 villeins and 5 bordars with 1½ ploughs, and 4 acres of meadow, and the fourth part of a mill worth 5 shillings (a year). T.R.E., and afterwards, it was worth 12 shillings; it is now worth 15 shillings.

The sons of Godric Mal<sup>2</sup> hold HANGRE [Hanger].<sup>3</sup> Their father held it of king Edward. It was then, as now, assessed at 1 hide. There is land for 1 plough. There are 2 villeins and 5 bordars with 1 plough, and 1 acre of meadow, and wood(land) worth 1 pig. It was worth 20 shillings; it is now worth 10 shillings.

### IN CLERE<sup>4</sup> HUNDRET

ALWIN Wit holds 2 hides, which he held T.R.E. They were then assessed at 2 hides; now at half a hide. There is land for 1½ ploughs. There is 1 plough (in demesne); and 2 serfs; (there are) 1 villein and 1 bordar with half a plough. It was worth 40 shillings; it is now worth 30 shillings.

This Alwin held this land T.R.E. under Wigot<sup>5</sup> for protection. He now holds it under Milo,<sup>6</sup> and it was delivered by Humfrey Visdelupo<sup>7</sup> to Wigot, in exchange for Bradewatre [Broadwater],<sup>8</sup> as he says himself; but (the jurors of) the Hundred know nothing of this.

EDWIN the huntsman<sup>9</sup> holds 2 hides belonging to (the sources of) the King's 'farm' which king Edward gave to him. They were then, as now, assessed at 1 virgate. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 5 bordars with 1 plough. There are 2 serfs, and 3 acres of meadow. It was, and is now, worth 18 shillings.

RAVELIN holds CLERE [Clere] of the King. He himself held it T.R.E. It was then assessed at 3 hides and half a virgate; now at 2 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 3 villeins and 18 bordars with 3 ploughs. There are 4 serfs, and a mill worth 50 pence (a year), and 3 acres of meadow. The pasture produces 6 shillings and 2 pence; it was, and is now, worth 65 shillings.

LEWIN holds 1 virgate of the King in CLERE [Clere]. He himself held it T.R.E.; and it was then, and is now, assessed at that amount. There is land for half a plough, and it is there with 1 serf; and (there are) 2 acres of meadow, and wood(land) for the fences. It is worth 5 shillings.

The same Lewin holds 1 hide in HANTUNE [Hannington]. Estan held it in parage (*in paragio*) of king Edward. It was then, as now, assessed at 1 hide. There is land for 1 plough. There is 1 villein; and (there are) 2 bordars and 3 serfs with half a plough. It was, and is now, worth 20 shillings.

<sup>5</sup> Wigot of Wallingford.

<sup>6</sup> Milo Crispin.

<sup>7</sup> *i.e.* Wolf's face. He was a Berkshire tenant-in-chief.

<sup>8</sup> In Sussex. Wigot had held it T.R.E. (*Domesday*, fos. 26b, 28b).

<sup>9</sup> This is another of king Edward's huntsmen who had been well provided for. In Dorset he held lands in Blandford St. Mary, Long Blandford, and Shilvington (nearly 13 hides in all). In that county he is entered only as one of king William's thegns; but the geld-roll identifies him as the huntsman.

<sup>1</sup> Redbridge.

<sup>2</sup> See fo. 51b below.

<sup>3</sup> A farm in Eling.

<sup>4</sup> Kingsclere.



# THE HOLDERS OF LANDS

## IN SUMBURNE<sup>1</sup> HUNDRET

ELDRED, Odo's<sup>2</sup> brother,<sup>3</sup> holds half a hide of the King. He himself held it of king Edward; and it was then assessed at half a hide; now at 1 virgate. There is land for 1 plough; half a plough is in the demesne, with 1 villein and 1 bordar and half a plough, and 2 acres of meadow. It was, and is now, worth 6 shillings.

ALMER holds half a hide of the King. ALWI held (it) of king Edward. It was then assessed at half a hide; now at 1 virgate. There is land for 1 plough. There are 2 bordars and 1 acre of meadow. It is, and was, worth 5 shillings.

ULVRIC the huntsman<sup>4</sup> holds 1 manor of the King. His father held it of king Edward. It was then assessed at 1½ hides of land; now at 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough; and (there are) 3 villeins and 2 bordars with 1 plough. There are 12 acres of meadow. It was, and is now, worth 20 shillings.

## IN BASINGESTOC HUNDRET

ALSI Berchenistre holds STIVETUNE [Steven-ton] of the King. ELFELM held it of king Edward; and there were reckoned to be (*habebantur*) there 5 hides; but it was then, and is now, assessed at 3 hides. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 5 villeins and 3 bordars with 2 ploughs and 8 serfs. T.R.E. it was worth 100 shillings, and afterwards 70 shillings; (it is) now (worth) 4 pounds.

GODWINE the falconer holds half a hide of the King, which he held of king Edward. It was then, as now, assessed at half a hide. It was, and is now, worth 4 shillings.

<sup>1</sup> King's Sombourne.

<sup>2</sup> Ode of Winchester.

<sup>3</sup> See Introduction. He is identified with the 'Aldred' who held five estates (17 hides) in Wilts as a King's thegn (fo. 73<sup>b</sup>), in 1086, by the geld-roll, which styles him 'Aldret frater Odonis' (Domesday, Vol. IV. p. 6).

<sup>4</sup> This is probably the same Wulfric as he who had succeeded his father at Lockerley above. It is certainly the same Wulfric as he who had succeeded to his father's lands in Dorset (in Wimborne, East Morden, and Horton), and in Wilts (fo. 74), in which latter county he is identified by the geld-roll.

## IN RODBRIGE<sup>5</sup> HUNDRET

ALWIN holds MERCEODE [Marchwood]<sup>6</sup> of the King. Ulviet his father held it. It was then, and is now, assessed at half a hide. There is land for 1 plough. Two villeins and 2 bordars have 1½ ploughs, and 2 acres of meadow. There is wood(land) worth 8 pence. It was worth 10 shillings; it is now worth 15 shillings.

EDMUND the son of Payn (*f. Pagen*) holds 1 virgate in DERLEIE [Durley in Eling] of the King, and Hugh (holds it) of him. Saulf held it of king Edward in parage (*in paragio*). There are 2 villeins with 1 plough, and half an acre of meadow. There was wood(land) worth 6 swine; but it is not (so now). It was worth 10 shillings; (it is) now (worth) 3 shillings.

COLA the huntsman holds half a hide of his father Ulviet, in LANGELIE [Langley in Fawley]. He held this of the King in parage (*in paragio*). It was then assessed at half a hide; (it is) now at one-fourth of a virgate. There is land for half a plough, which is in (the) demesne with 1 bordar, and half an acre of meadow. There is wood(land) worth 5 swine. It was, and is now, worth 6 shillings.

ALVRIC Petit holds 1 virgate in the forest. A colibert<sup>7</sup> held it as farmed of the King (*in firma regis*); and at present Alvruc claims (*reclamat*) it of the bishop of Saintes. It was formerly, and is now, assessed at 1 virgate. There is land for 1 plough. It was worth 6 shillings; (it is) now (worth) 12 shillings.

EDMUND holds STANES [Stone in Fawley] of the King. Sawin and Elmar held it in parage (*in paragio*), and had each of them a hall. It was then, as now, assessed at half a hide. There is land for 2 ploughs. There is 1 bordar only. T.R.E. it was worth 60 shillings, and afterwards 10 shillings; (it is) now (worth) 5 shillings.

[NOTE. The following four manors are quite distinct from the preceding, and belong to the New Forest section below.]<sup>8</sup>

## IN RODEDIC HUNDRET

Hugh de Porth holds 1½ hides in MILDELTUNE [Milton], and William Orenet (holds them) of him. Alwin held them in parage (*in paragio*). There is land for 3 ploughs.

<sup>5</sup> Redbridge.

<sup>6</sup> In Eling.

<sup>7</sup> 'Colibertus' in text, as if it were a proper name.

<sup>8</sup> See Introduction.

## A HISTORY OF HAMPSHIRE

In (the) demesne is 1 plough, and 5 villeins have there 2 ploughs. There are 1 serf and  $3\frac{1}{2}$  acres of meadow. T.R.E., and afterwards, it was worth 40 shillings; (it is) now (worth) 20 shillings. T.R.E. it was assessed at  $1\frac{1}{2}$  hides; now at 1 hide. The wood(land) of this manor, worth 20 swine, the King has now in his forest. It is worth 20 shillings.

### IN RODBRIDGE<sup>1</sup> HUNDRET

HUGH de St. Quintin holds LANCELIE [Langley in Fawley], by authority of (*per*) the bishop of Bayeux, as he says, in exchange for a mill, which he held (*habebat*) of a man. Four allodial owners (*alodiarii*) held it in parage T.R.E. Then, as now, (it was assessed) at 1 hide. There is land for 2 ploughs. There are 6 villeins and 7 bordars with 2 ploughs. T.R.E., and afterwards, it was worth 20 shillings; (it is) now (worth) 30 shillings.

### IN RODEDIC HUNDRET

Hugh Latinarius holds 1 hide and 1 virgate of the King in ERNEMUDE [Arnewood in Hordle]. Siward held it of earl Tosti(g). It was then assessed at 1 hide and 1 virgate; now at nothing. There is land for 3 ploughs. There 1 villein and 9 bordars have 1 plough, and 5 acres of meadow. T.R.E., and afterwards, it was, as now, worth 30 shillings. What is in the forest is worth 4 shillings.

### IN FORDINGEBRIGE HUNDRET

The King holds CANTORTUN [Cantertun in Minstead] in his forest. Chenna held it of king Edward; and he is still there (*in eadem*).<sup>2</sup> It then paid geld for half a virgate, (but) now<sup>3</sup> for one-fourth of a virgate (*uno ferding*). The other fourth is in the king's forest. In (the) demesne is half a plough with 4 bordars. The wood(land) and meadow are now in the forest. T.R.E. it was worth 20 shillings. Chenna's share is) now (worth) 4 shillings; and the King's) 16 shillings.

### IN NETEHAM<sup>4</sup> HUNDRET

Godwine held Wardham [Worldham?] T.R.E., which paid geld for 1 hide and 1 virgate. The same Godwine held, in the same Hundred, Haliborne [Holybourn], which paid geld for 2 hides. There is land for 2 ploughs. The valuation (*precium*) of both these lands was 40 shillings.<sup>5</sup>

<sup>1</sup> Redbridge.

<sup>2</sup> It is doubtful how this should be rendered.

<sup>3</sup> 'Modo' written, as if in correction, above 'et.' <sup>4</sup> Alton and Selbourne.

<sup>5</sup> This entry was a postscript (see Introduction).

fo. 51.

## IN THE NEW<sup>6</sup> FOREST AND ROUND ABOUT IT

### IN RODBRIGE HUNDRET

I. THE KING had, and has, 1 hide in ACHELIE [Oakley],<sup>7</sup> which belongs to (the sources of) the 'farm' of the Isle of Wight. Cheping held it in parage (*in paragio*). It was then assessed at 1 hide, but is now assessed at nothing. There is land for 4 ploughs. T.R.E., and afterwards, it was worth 50 shillings. It is now in the forest. The King put (*misit*) it there.

II. WALCHELIN the bishop had 1 hide and 3 virgates of land in FAELIE [Fawley], which paid geld for that amount; (but) now for nothing. There is land for 12 ploughs. T.R.E., and afterwards, it was worth 50 shillings; it is now in the forest.

### IN BOVRE<sup>8</sup> HUNDRET

The same Bishop had<sup>9</sup> TRUHAM [Fritham<sup>10</sup> in Bramshaw] in demesne which was the minster's; and it was assessed at  $2\frac{1}{2}$  hides. There is land for 4 ploughs. T.R.E., and afterwards, it was worth 60 shillings. It is now in the forest.

The same Bishop had SCLIVE [Cliff],<sup>11</sup> in demesne, and it was always the minster's. It was assessed at 3 hides. There is land for 8 ploughs. T.R.E., and afterwards, it was worth 10 pounds. It is now (all) in the forest, except the meadow, which is still in the possession of him who held the manor. There are 8 acres of meadow.

III. Earl ROGER<sup>12</sup> had LESTEORDE [Testwood in Eling]. Two allodial owners (*alodiarii*) held it (T.R.E.) in parage (*in paragio*), and this land was assessed at 1 hide. T.R.E., and afterwards, it was worth 40 shillings. It is now in the forest, except the fourth part

<sup>6</sup> 'Nova' is interlined.

<sup>7</sup> Not identified by Mr. Moody. There is an 'Oakley enclosure' in Burley, but the identification would be a mere guess, though one would expect some mention of Burley in the Survey. It was not, however, in 'Rodbrige' (Redbridge) Hundred.

<sup>8</sup> The New Forest Hundred.

<sup>9</sup> Note that the past tense (*habuit*) here refers to a time not earlier than 1070.

<sup>10</sup> Not identified by Mr. Moody.

<sup>11</sup> Highcliff?

<sup>12</sup> Of Shrewsbury.



## THE HOLDERS OF LANDS

of 1 virgate, which is held of the Earl by a certain man, who has there 3 bordars. It is worth 3 shillings.

The same Earl holds 1 hide in SUEI [Sway in Boldre], and Fulcoïn (holds it) of him. Alvred held it in parage (*in paragio*). It was then assessed at 1 hide; now at 3 virgates; and the fourth virgate is in the forest. There is land for 1 plough in the Manor. There 4 bordars have half a plough, and 1 acre of meadow. T.R.E., and afterwards, it was, and is now, worth 9 shillings. What the King has (is worth) 2 shillings.

The same Earl has (*h't*) 1 hide in SUEI [Sway in Boldre], and Nigel (holds it) of him. Durand held it in parage (*in paragio*). It was then assessed at 1 hide. (It is) now (assessed) at 1 virgate; the other (virgates) are in the forest. There 2 villeins have 1 plough, and half an acre of meadow. It was worth 20 shillings; it is now worth 5 shillings. The King's share is worth 15 shillings.

The same Earl has (*h't*) 1 hide in BEDESLEI [(South) Baddesley in Boldre], and Durand (holds it) of him. Suarting held it in parage (*in paragio*). It was then assessed at 1 hide; now at 1 virgate; the other (virgates) are in the forest. There is land for 1 plough. There 1 villein and 3 bordars have 1 plough. It is worth 3 shillings.

The same Earl holds 1 hide in OSELEI [Ossemley in Milton], and Nigel (holds it) of him. Salide held it in parage (*in paragio*). It was then assessed at 1 hide. It is now in the forest, except 1 acre of meadow, which Nigel holds. It was worth 40 shillings.

The same Earl holds 1 hide in OSELEI [Ossemley in Milton], and Fulcuïn holds it under him. Godwine held it in parage (*in paragio*). It was then assessed at 1 hide; but it is now in the forest, 2 acres of meadow excepted. There was land for 2 ploughs, and it was worth 20 shillings.

The same Earl had TRUCHAM [Fritham<sup>1</sup> in Bramshaw] (as) 2 manors, and William (held it) of him. Colgrin and Edwi held it (T.R.E.) in parage (*in paragio*); and it was assessed at 2½ hides. The whole (is) now in the forest. There was land for 4 ploughs. It was worth 60 shillings.

The same Earl holds half a hide in WOLNETUNE [Walhampton in Boldre], and Fulcuïn (holds it) of him. Alnod held it in parage (*in paragio*). It was then assessed at half a hide; now at 1 virgate. There is land for 1 plough, which is there in (the) demesne, with 1 bordar and 1 serf. T.R.E. it was worth 15 shillings. It was afterwards, and is now, worth 10 shillings. The wood(land) is in the forest and is worth 4 shillings.

The same Earl holds 1 hide in LENTUNE [Lymington], and Fulcuïn (holds it) of him. Leuing held it in parage (*in paragio*). (It was) then (assessed) at 1 hide; now at half a hide (only), because the wood(land) is in the forest. There is land for 2 ploughs. There 1 villein, 2 serfs, and 3 bordars have 1 plough and 4 acres of meadow. T.R.E. it was worth 20 shillings; it was afterwards, and is now, worth 15 shillings.

The same Earl has (*h't*) half a hide in HENTUNE [Hinton (Admiral) in Christchurch], and Fulcuïn (holds it) of him. Ulwi held it in parage (*in paragio*). It was then assessed at half a hide; (it is) now (assessed) at 1½ virgates only, because the other (*alia*) is in the forest. There is land for 1 plough, and it is there with 3 villeins and 1½ acres of meadow. It was, and is now, worth 15 shillings. What the King has (*h't*) (is worth) 3 shillings.

The same Earl has (*h't*) 5½ virgates in ESSELIE [Ashley];<sup>2</sup> and Nigel (holds them) of him. Saolf held them in parage (*in paragio*). It was then assessed at 5½ virgates; (it is) now (assessed) at 4½ virgates, 1 virgate being in the forest. There is land for 3 ploughs, and (one?) is there in (the) demesne, and (there are) 2 villeins and 10 bordars with 2 ploughs, and 5½ acres of meadow. It was worth 50 shillings; (it is) now (worth) 20 shillings. What the King has is worth 6 shillings.

The same Earl has (*h't*) 7 virgates in BERMINTUNE<sup>3</sup> [Badminton<sup>4</sup> in Fawley]; and

<sup>2</sup> I take this to be Ashley in Milton.

<sup>3</sup> The 'Bermintune' of this and the following entry is a difficulty. Mr. Moody's identification is as above; but Mr. Moens kindly informs me that 'this is Birmingham (as now called) in Sway—then held by Durand; there is a portion of Sway still called Durand's Town.' Neither of these names is found on the Ordnance map, which has, however, a 'Durns Town'; and the place of the entry makes a Sway locality more probable than a Fawley one.

<sup>4</sup> Now a farm.

<sup>1</sup> Not identified by Mr. Moody.

## A HISTORY OF HAMPSHIRE

Durand (holds them) of him. Alvrice held (them) of king Edward. They were then assessed at 7 virgates. (They are) now (assessed) at 5 virgates, because the other (virgates) are in the forest. There is land for 3 ploughs. In (the) demesne is 1 plough, and 3 villeins and 3 bordars have 2 ploughs. There are 2 serfs. T.R.E. it was worth 40 shillings, and afterwards 30 shillings; it is now worth 20 shillings. What the King has is worth 6 shillings.

The same Earl has (*h't*) 1 hide in BURMINTUNE [Badminton in Fawley], and Durand (holds it) of him. Ulward held it in parage (*in paragio*). (It was) then assessed at 1 hide. (It is) now (assessed) at half a hide only, (because) the other (half) is in the forest. There is land for 1 plough, which is in (the) demesne, with 1 bordar and half an acre of meadow. It was worth 20 shillings; it is now worth 10 shillings. What the King has is worth 6 shillings.

The same Earl has (*h't*) 1 hide in HENTUNE [Hinton (Admiral) in Christchurch], and Nigel (holds it) of him. Edric held it in parage (*in paragio*). (It was) then (assessed) at 1 hide. (It is) now (assessed) at 3 virgates, 1 virgate being in the forest. There is land for 3 ploughs. There 6 villeins have 2 ploughs and 6 acres of meadow. It was, and is now, worth 15 shillings. What the King has is worth 3 shillings.

The same Earl has (*h't*) 1 hide in BICHELEI [Beckley in Christchurch]<sup>1</sup> and Nigel (holds) it of him. Holengar held it in parage (*in paragio*). (It was) then (assessed) at 1 hide. (It is) now (assessed) at 3 virgates, 1 virgate being in the forest. There is land for 4 ploughs. There 4 villeins have 2 ploughs and 4 acres of meadow. It was worth 20 shillings; it is now worth 15 shillings. What the King has is worth 5 shillings.

The same Earl holds the third part of a hide in FERNEHELLE [Fernhill],<sup>2</sup> and Nigel (holds it) of the Earl. Godric held it in parage (*in paragio*). (It was) then (assessed) at 3 virgates; (it is) now (assessed) at 1 virgate; the remainder being in the forest. There is land for 1 plough, and it is there with 1 villein. It was worth 13 shillings; it is now worth

10 shillings. What the King has is worth 3 shillings.

### IN RODEDIC HUNDRET

III. WILLIAM de Ow holds 1 manor, and Bernard (holds it) of him. Coolf held it of king Edward. It was then assessed at 2 hides; now at 5 virgates. There is land for 3 ploughs. There 3 villeins and 2 bordars have 2 ploughs and 6 acres of meadow. T.R.E., and afterwards, it was worth 60 shillings; it is now worth 30 shillings. The King has 1 virgate, with (the) wood(land), which is worth 5 shillings.

V. RALF de Mortemer holds HERDEL [Hordle], and Oidelard (holds it) of him. Justin held it of king Edward. (It was) then (assessed) at 5 hides; (it is) now (assessed) at 4 hides, the fifth being in the forest. There is land for 5 ploughs. There 6 villeins and 9 bordars have 4 ploughs. There are a mill and 6 salt pans worth 15 pence. T.R.E. it was worth 8 pounds, and afterwards 100 shillings; and now the same. The wood(land), where dwelt 6 men, is now in the King's forest; it is worth 60 shillings.

VI. HUGH de Port holds 1½ virgates in PISTESLEI [Pille in Boldre],<sup>3</sup> and Hugh of St. Quintin (holds it) of him. Algar held it in parage (*in paragio*). It was then assessed at 1½ virgates; now at nothing, because it is all in the forest, 1½ acres of meadow excepted. There was land for 1 plough. It was worth 10 shillings.

The same Hugh holds 1 hide in TRUHAM [Fritham in Bramshaw], and Hugh de St. Quintin (holds it) of him. Wislac held it in parage (*in paragio*). (It was) then (assessed) at 1 hide; (it is) now (assessed) at nothing, because it is all, 1 acre of meadow excepted, in the forest. There was land for 2 ploughs. It was worth 30 shillings.

[VII.] EDWARD of Salisbury (*Sarisberia*) holds 2 hides in ALWINETUNE [ ], and Robert (holds them) of him. Two allodial owners (*alodarii*) held them in parage (*in paragio*). (They were) then (assessed) at 2 hides; (they are) now (assessed) at nothing, because they are all, 12 acres of meadow excepted, in the forest. There was land for 4 ploughs. It was worth 100 shillings.

[VIII.] RANNULF Flanbart holds 1 hide

<sup>1</sup> Mr. Moody made it Beckley in Milton; but Beckley is just in the parish of Christchurch adjoining Hinton.

<sup>2</sup> An estate in Milton.

<sup>3</sup> Not identified by Mr. Moody.



## THE HOLDERS OF LANDS

of the King in BILE [ ]. Alwold held it in parage (*in paragio*). It was then assessed at 1 hide; it is now assessed at nothing, because it is all, 4 acres of meadow excepted, in the forest.

The same Rannulf held 1 hide in the same vill; and it was assessed, T.R.E., at that amount. It is now all, except 4 acres of meadow, in the forest. There was land for 4 ploughs. These 2 lands were worth 4 pounds.

The same Rannulf holds 1 hide of the King in BECESLEI [Beckley].<sup>1</sup> Two allodial owners (*alodiarii*) held it. (It was) then (assessed) at 1 hide; (it is) now (assessed) at 3 virgates. There is land for 2 ploughs. There 3 villeins have 1 plough and  $2\frac{1}{2}$  acres of meadow. It was worth 15 shillings; it is now worth 4 shillings, and there is a mill worth 30 pence.

### IN RODERIDGE HUNDRET

[IX.] Hugh the son of Osmund<sup>2</sup> holds 1 hide of the King in HARIFORDE<sup>3</sup> [? Hartford]. Alvríc held it in parage (*in paragio*). (It was) then (assessed) at 1 hide; (it is) now (assessed) at nothing, because it is in the forest. There was land for 4 ploughs. It was worth 25 shillings.

fo. 51b.

### IN RODERIDGE<sup>4</sup> HUNDRET

ODE<sup>5</sup> holds DEPEDENE [Dibden] of the King. Chetel held it of king Edward. It was then assessed at 5 hides; now at 2 hides, —and it pays geld for 1 only—because 3 hides are in the forest. There is land for 4 ploughs. There are 4 villeins and 15 borders with 5 ploughs. There are 9 acres of meadow. There is wood(land) worth 6 swine. (Also) a saltpan and a fishery. T.R.E. it was worth 10 pounds, and afterwards 8 pounds; (it is) now (worth) 50 shillings, but it pays 100 shillings.

<sup>1</sup> In Ringwood? Mr. Moody made it 'A manor in Christchurch' (the 'Bichelei' above); but Mr. Wise, in *The New Forest* (p. 126), observes, of Sandford in Ringwood, that the Ordnance map erroneously 'omits the neighbouring village of Beckley, the "Beceslei" of Domesday, and "The Great Horse," a clump of firs, so called from its shape, a well-known landmark in the Forest.'

<sup>2</sup> See, for his other holding, p. 502 above.

<sup>3</sup> This appears to me to be Hartford farm to the north of Beaulieu. <sup>4</sup> Redbridge.

<sup>5</sup> Ode (of Winchester) here heads the list of King's thegns, as on p. 504 above.

PAGEN holds of the King 1 hide and 1 virgate in BOCOLT [Buckholt].<sup>6</sup> Sawin held it in parage (*in paragio*), and (it) was assessed at 5 virgates. It is now in the forest. There is land for 6 ploughs. It was worth 100 shillings.

TURBERT the huntsman had 1 hide in OTREORDE [Otterwood<sup>7</sup> in Beaulieu], and it was assessed at that amount. It is now in the forest. (There was) land for 2 ploughs. It was worth 21 shillings.

Two allodial owners (*alodiarii*) had half a hide in NUTLEI [Netley marsh in Eling]. There was land for 2 ploughs. It was worth 25 shillings.

Alvríc and 2 (other) allodial owners (*alodiarii*) had 1 hide and 1 virgate in OTREORDE [Otterwood in Beaulieu]; and it was assessed at that amount. It is now in the forest. (There was) land for 3 ploughs. It was worth 30 shillings.

GODRIC and Elnod had 2 hides in GATINGEORDE [Gatewood in Exbury?]; and they were assessed at that amount. They are now in the forest. There is land for 5 ploughs. It was worth 45 shillings.

Bolle and Ulviet had 2 hides in TEOCREBERIE [Tatchbury in Eling]; and they were assessed at that amount. It is now in the forest. They were worth 40 shillings.

GODRIC and Agemund (held) 1 hide in ROWESTE [ ] in parage (*in paragio*); and it was assessed at that amount. It is now in the forest. There is land for 2 ploughs. It was worth 15 shillings.

BERNARD Pancevolt (held) 3 virgates, and Sawin 1 hide, in HARDELIE<sup>8</sup> [Hardley]; and they were assessed at that amount. It is now in the forest. There is land for 2 ploughs. It was worth 30 shillings.

### IN EGEIETE HUNDRET<sup>9</sup>

Saulf's wife holds HOBURNE [Hubborn in Christchurch] of the King. Sault held it or

<sup>6</sup> I do not find this place on the Ordnance map, but Mr. Wise says that 'Ashhurst (in Colbury) and Buckholt and Dibden come in regular succession' (*The New Forest*, p. 51).

<sup>7</sup> Now a farm.

<sup>8</sup> I take this to be Hardley in Fawley.

<sup>9</sup> Part of Christchurch Hundred.

## A HISTORY OF HAMPSHIRE

the King. It was then assessed at 1 hide; now at 1 virgate. There is land for 1 plough. There are 2 bordars and 6 acres of meadow. It was worth 20 shillings; it is now worth 15 shillings.

In the same Hundred Willac has 4 acres of meadow; and Alvríc the physician (also) 4 acres.

### IN RINCVEDE<sup>1</sup> HUNDRET

BERNARD the chamberlain holds HERDEBRIGE [Harbridge] of the King. Ulveva held it. It was then assessed at 5 hides; now at 3 hides and 1 virgate. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 8 villeins and 2 bordars with 4 ploughs and 80 acres of meadow. There is wood(land) worth 2 swine. T.R.E. it was worth 4 pounds 10 shillings; it was afterwards, and is now, worth 70 shillings.

### IN BOVRE HUNDRET

BOLLE had half a hide of the King in GRETEHAM [Greatnam].<sup>2</sup> Waleran the huntsman then (?) held it,<sup>3</sup> and was assessed at 1 hide. It is now in the forest. It was worth 40 shillings.

CHEPING held 3 virgates of the King in ACHELIE<sup>4</sup> [Oakley?], and (it) was assessed at that amount. It is now in the forest. It was worth 40 shillings.

WISLAC held 1 hide of the King in BOVRE-FORD [Boldreford].<sup>5</sup> It is now in the forest, except 2 acres of meadow, which Hugh of St. Quintin holds. It was worth 10 pounds (*sic*).

EDRIC had 1 hide of the King in PISTELEI [Pilley in Boldre]; and it was assessed at that amount. It is now in the forest, except 6 acres of meadow, which Hugh of St. Quintin holds. It was worth 30 shillings.

<sup>1</sup> Ringwood.

<sup>2</sup> On the border of Lyndhurst and Brockenhurst parishes.

<sup>3</sup> 'tenebat modo.' Apparently an error.

<sup>4</sup> See note on p. 510 above. Achelie is here placed in Boldre Hundred.

<sup>5</sup> Mr. Moens, who resides on the spot, tells me that this is now 'The Shallows,' south of Boldrebridge, and about a mile above Lymington. But there is still, I find, a 'Bolderford Bridge' some 2 or 3 miles up stream beyond Brockenhurst.

ALVRIC had WIGARESTUN [ ] of the King in parage (*in paragio*). It was assessed at 1 hide. It is now in the forest, except 1 acre of meadow, which the same Alvríc holds. There was land for 2 ploughs. It was worth 5 shillings.

PAGEN held 2 manors called BOVRE [Boldre]. Two allodial owners (*alodiarii*) held them in parage (*in paragio*). They were then assessed at 2 hides. It is now in the forest, except 6 acres of meadow, which Hugh of St. Quintin holds. There was land for 4 ploughs. It was worth 3 pounds.

BRIXI had CILDEEST [Yaldhurst in Milford] of the King in parage (*in paragio*). It was assessed at 5 hides. It is now in the forest, except 2 acres of meadow, which Alvríc the Little (*parvus*) holds. There was land for 8 ploughs. It was worth 8 pounds.

ALVRIC the Little (*parvus*) had 1 hide and 2 virgates in parage (*in paragio*) in TRUHAM [Fritham in Bramshaw];<sup>6</sup> and it was assessed at that amount. It is now in the forest. There was land for 4 ploughs. It was worth 4 pounds.

HUNTA had 1 hide in TRUHAM [Fritham in Bramshaw], and (it) was assessed at that amount. It is now in the forest. There is land for 3 ploughs. It was worth 30 shillings.

SAWIN had 1 virgate in the same Hundred, which never paid geld. It is now in the forest, except 1 acre of meadow, which Hugh of St. Quintin holds. It was worth 12 pence.

SAULF and ALVRIC had 2 hides in BETRAMELEI [Battramsley in Boldre]; and (it) was assessed at that amount. It is now in the forest, except 4 acres of meadow, which Saulf holds. There is land for 5 ploughs. It was worth 3 pounds. There Peret the forester (holds) half a virgate of the King.

SAUL had half a hide in SANHEST [ ]; and (it) was assessed at that quantity. It is now in the forest. There is land for 2 ploughs. It was worth 20 shillings.

HUNTA and Pagen held 2½ virgates in

<sup>6</sup> This has been mistaken for the name of a Hundred, but the word 'Hundred' is omitted. (See Introduction.)



## THE HOLDERS OF LANDS

parage (*in paragio*); and (it) was assessed at that amount. It is now in the forest, except 1 acre of meadow which ALVRIC holds. There is land for 2 ploughs. It was worth 20 shillings.

ALVRIC had half a hide in PISTESLAI [Pilley in Boldre]; and (it) was assessed at that amount. It is now in the forest, except 3 acres of meadow, which the same Alvríc holds. There is land for 2 ploughs. It was worth 15 shillings.

ALVRIC and Agemund held 3 virgates of land in COCHERLEI [ ]. They are now in the forest. (There is land) for 2 ploughs. It was worth 3 pounds.

Two allodial owners (*alodiarii*) held 1 virgate in NUTLEI [Netley in Eling] in parage (*in paragio*), and it was assessed at that quantity. It is now in the forest. There is land for 1 plough. It was worth 6 shillings.

EDNOD had 2 hides in parage (*in paragio*) in BROCHELIE [Brookley]<sup>1</sup> and Mapleham [ ], and it was assessed at 2 hides. It is now in the forest. There is land for 6 ploughs. It was worth 20 shillings.

WISLAC held half a hide in HINCELVESLEI [Hinceleseey in Brockenhurst]; and (it) was assessed at that quantity. It is now in the forest. There is land for 2 ploughs. It was worth 20 shillings.

### IN RODEDIC HUNDRET

GODRIC held ODETUNE [Wootton]<sup>2</sup> of the King. It was then assessed at 1 hide. It is now in the forest, except 15 acres of meadow, which Godric still holds. There is land for 2 ploughs. It was worth 40 shillings.

WISLAC and Alvríc held in parage (*in paragio*) 2 hides in OXELEI [ ], which Bolla held. It was then (assessed) at 2 hides. It is now in the forest, except 4 acres of meadow, which they still hold. There was land for 4 ploughs. It was worth 40 shillings.

ULVRIC has 1 virgate of land in GODESMANESCAMP [Godshill in Fordingbridge].<sup>3</sup>

Then, as now, it was assessed at 1 virgate. There is land for 1 plough, which is in (the) demesne. It was, and is now, worth 4 shillings.

ULGAR has, of the King, 1 virgate of land in MELLETFORD [Milford], which he himself held of king Edward. It was then assessed at 1 virgate; now assessed at three-fourths of a virgate (*virgæ*). There is nothing there; and yet it is worth 3 shillings. The wood(land) is in the King's forest; it is worth 12 pence.

The sons of Godric Malf hold one hide in ESSELEI [Ashley in Milton]. Their father held it of the King. (It was) then (assessed) at 1 hide; (it is) now (assessed) at 1 virgate. There is land for 1 plough. There are 3 serfs (*sic*), and 1 serf (*sic*) and 2 bordars with half a plough, and 4 acres of meadow. T.R.E., and afterwards, it was worth 20 shillings; it is now worth 15 shillings. Wood(land) of this manor, producing 8 swine, is in the King's forest; it is worth 5 shillings.

<sup>4</sup> The sons of Godric Malf have MINTESTEDE [Minstead] of the King. Their father held it of king Edward. It was then assessed at 3½ hides. The sons have now only half a hide, which has paid geld for 1 virgate. The remainder is in the forest. There is land for 1 plough, which is in (the) demesne, with 4 bordars and 3 serfs, and 16 acres of meadow. There is wood(land) worth 10 swine, and there is a haw (*haga*) in Wincestre worth 12 pence (per annum). This manor T.R.E. was worth 8 pounds, and afterwards 15 shillings; it is now worth 20 shillings.

The same (sons) hold also BETESTRE [Bistern with Crow in Ringwood] of the King. Their father held it in parage (*in paragio*) of king Edward. It was then assessed at 3 hides. There are now 2 hides, which have paid geld for 1½ hides. The third hide is in the forest. There is land for 3 ploughs. In (the) demesne is 1 plough; and 5 villeins and 4 bordars have 2 ploughs. There are 32 acres of meadow. There is wood(land) worth 20 swine. It was worth 60 shillings; (it is) now (worth) 40.

The same (sons) also hold 2 hides in

<sup>1</sup> An estate in Brockenhurst.

<sup>2</sup> A manor in Milton.

<sup>3</sup> Mr. Moody's identification. It seems a doubtful one.

<sup>4</sup> The following three entries relating to these tenants are added at the foot of the column.

## A HISTORY OF HAMPSHIRE

CRONE [Bistern with Crow in Ringwood] of the King. Their father held (them) of king Edward. It was then, as now, assessed at 2 hides. There is land for 2 ploughs, which are there with 4 villeins and 5 bordars, and 36 acres of meadow. T.R.E. it was worth 40 shillings; (it was) afterwards, and is now, (worth) 25 shillings.

ALVRIC holds MELLE福德 [Milford] of the King, in exchange for land in the forest (*de excambio forestæ*). Saolt held it of king Edward. It was then assessed at 1 hide; now at half a hide only, because the rest<sup>1</sup> is in the forest. There is land for 1 plough. In (the) demesne is 1 plough; and (there are) 4 villeins and 6 serfs, with 1 plough and a mill worth 30 pence, and 2 acres of meadow. T.R.E. it was worth 20 shillings, and afterwards 10 shillings; it is now worth 20 shillings. The King's share is worth 10 shillings.

The same Alvríc holds half a hide in EINFORDE [Efford in Milford]. His father held it in parage (*in paragio*). It was then, and is now, assessed at half a hide. There is land for 2 ploughs, and they are there with 3 villeins, and a mill held by one who is keeper of the King's house. It was worth 5 shillings; it is now worth 10 shillings.

The same Alvríc holds 1½ virgates in UTEFEL [ ]. Leuing and Chetel held (it), of whom Alvríc bought it in the time of king William. It was then, as now, assessed at 1½ virgates. There are 2 villeins with half a plough. It was, and is now, worth 5 shillings.

The same Alvríc holds 3 virgates of land, and Alwold (holds them) of him. He himself held them of king Edward. Then, as now, they were assessed at 3 virgates. There is land for 1 plough, which is there with 1 villein and 3 bordars, and 1 acre of meadow. There is wood(land) worth 4 swine; but it is in the forest. It was, and is now, worth 10 shillings. What is in the forest is worth 4 shillings.

The same Alvríc holds 1 hide in BROCESTE [Brockenhurst]. His father and uncle held it

in parage (*in paragio*). It was then assessed at 1 hide; now at half a hide. There is land for 1 plough. In (the) demesne is 1 plough; and (there are) 6 bordars and 4 serfs with 2½ ploughs. There are a church and wood(land) worth 20 swine. T.R.E. it was worth 40 shillings; it was afterwards, and is now, worth 4 pounds.

Edmund holds 1 hide in SUEI [Sway]. Algar held it of king Edward. It was then, and is now, assessed at 1 virgate. There is land for 2 ploughs, (which are there) with 5 bordars. There are 2 acres of meadow. T.R.E., and afterwards, it was worth 10 shillings; it is now worth 15 shillings.

fo. 52.

### [SOUTHAMPTON]

IN THE BOROUGH OF HANTUNE the King has 76 men, who pay [between them] £7 for land-gafol (*de gablo terre*) as they did in the time of king Edward. Twenty-seven of these pay 8d. each, two pay 12d., and the other fifty 6d.

The land of the following in this borough was quit (*quietam*), by the King's action (*ab ipso rege*), in the days of king Edward: Odo of Winchester; Anschil the priest; Chetel; Fulghel; Tostill; the sons of Elric had 16 acres, (and) Gerin 18 acres; Cheping had 3 houses quit, which Ralf de Mortemer now holds; Godwine 3 houses, which Bernard Pancevold holds. After king William came into England, there settled in Hantone, 65 men of French birth, and 31 English. These all pay between them £4 os. 6d. for all dues.

The following are entitled to (*habent*) the dues from their houses in Hantone by grant of king William: G[oeffrey] bishop [of Coutances] from 1; the abbot of Cormeilles 1; the abbot of Lire 1; the count of Evreux 2; Ralf de Mortemer 2; Gilbert de Breteville 2; William son of Stur 2; Ralf de Todení 1; Durand de Glouuecestre 2; Hugh de Port 1; Hugh de Grentemaisnil 2; the count of Mortain 5; Aiulf the chamberlain 5; Humfrey his brother; Osbern Gifard 1; Nigel the physician 4; Richer de Andeli 4; Richard Pugnant 1; Stephen Stirman 2; Turstin the chamberlain 2; Turstin the engineer (*machinator*) 2; Anschitil son of Osmund 3; Rainald Croc 1. The abbess of Wherwell has a fishery and a small piece of land; it then paid 100 pence, now 10 shillings.

<sup>1</sup> 'æccl[esi]a pars' (?) 'alia pars').



# THE HOLDERS OF LANDS

## LAND OF THE KING IN THE ISLE OF WIGHT<sup>1</sup>

### IN BOUECOME HUNDRET

I. King William holds BROC [Brook] in demesne. Earl Tosti(g) held it. (It was) then assessed at 3 hides; now at 1 hide. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 3 villeins and 7 bordars with  $2\frac{1}{2}$  ploughs. There are 9 serfs and a mill worth 15 pence, and 6 acres of meadow. T.R.E. it was worth 7 pounds, and afterwards 6 pounds; (it is) now (worth) 7 pounds, but it pays 7 pounds more.

The King holds CANTUNE [Compton in Freshwater]<sup>2</sup> in demesne. Earl Tosti(g) held it. It was then assessed at 3 hides; now at 1 hide. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 7 villeins and 3 bordars with 2 ploughs. There are 1 serf and 2 acres of meadow. T.R.E. it was worth 6 pounds. It was afterwards, and is now, worth 100 shillings, but it pays 60 shillings more.

The King holds AFFETUNE [Afton]<sup>3</sup> in demesne. Earl Tosti(g) held it. It was then assessed at 4 hides; now at 3 hides less 1 virgate. There is land for 8 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 8 bordars with 6 ploughs. There are 12 serfs and 6 acres of meadow. T.R.E. it was worth 10 pounds; it was afterwards, and is now, worth 8 pounds, but it pays 10 pounds.

The King holds WELIGE [Wellow] in demesne. Coolf held it in parage (*in paragio*) of the King. It was then assessed at 2 hides; now at 3 virgates. There is land for 4 ploughs. In (the) demesne are 2 ploughs; and (there are) 6 villeins and 3 bordars with  $1\frac{1}{2}$  ploughs. There are 4 serfs, and 6 acres of meadow. T.R.E., and afterwards, it was, as now, worth 10 pounds, but it pays 15 pounds.

The King holds FRESCEWATRE [(Kings) Freshwater] in demesne. Earl Tosti(g) held it. It was then assessed at 15 hides; now at 6 hides. There is land for 15 ploughs. In (the) demesne are 2 ploughs; and (there are)

18 villeins and 10 bordars with 8 ploughs. There are 7 serfs and 6 acres of meadow. T.R.E. it was worth 16 pounds, and afterwards 20 pounds; but it is farmed (*ad firmam*) for 30 pounds. Of these 15 hides the abbey of Lire holds 3 virgates; and William the son of Azor 1 hide.

The King holds WILMINGEHAM [Wilmington in Freshwater] in demesne. Ulviet the huntsman held it in parage (*in paragio*). (Assessment) then, as now, 1 hide. There is land for 1 plough. There are 3 villeins with 2 ploughs, and half an acre of meadow. It was, as now, worth 20 shillings.

Of this manor of the King, Rainald the son of Croc holds 1 virgate, and says that Earl Roger (of Hereford) gave it to his father. It was worth 5 shillings; it is now waste (*vastata*).

The King holds BOUECOMBE [Bowcombe in Carisbrooke] in demesne. It belonged to king Edward's 'farm' (*de firma*). It was then assessed at 4 hides; now at nothing. There is land for 15 ploughs. In (the) demesne are 3 ploughs; and (there are) 25 villeins and 15 bordars with 15 ploughs. There are 10 serfs, and 8 acres of meadow, and a mill worth 40 pence. There is a toll which produces 30 shillings; and a saltpan which returns nothing (*sine censu*). There is wood(land) worth 5 swine.

Of the land of this manor William the son of Stur holds half a virgate. There is 1 plough with 1 villein. It is worth 10 shillings.

[And] Gozelin and William his brother<sup>4</sup> hold 1 virgate, which used to pay gafol (*gablum*) before they had it in possession; but these (men) pay none.

The monks of Lire hold the church of this manor, with 1 virgate of land.

Of this virgate of land Humfrey holds a portion where he has 8 men, who pay 5 shillings, and William, the son of Azor has  $2\frac{1}{2}$  acres on which he has 4 houses. They hold (this) without the consent of the priest. There belong (*adjacent*) to this church 20 messuages, inhabited by bordars, who pay 14 shillings. There is a mill worth 6 shillings, and all the tithes of Bouecombe [Bowcombe] belong to the same church. The whole was worth, T.R.E. and afterwards, as now, 20 pounds. What the abb[ey] has is worth 4 pounds.

<sup>1</sup> 'de With' interlined.

<sup>2</sup> Now a farm.

<sup>3</sup> I take this to be Afton in Freshwater.

<sup>4</sup> The sons of Azor.

## A HISTORY OF HAMPSHIRE

The King holds HELDELIE [ ] in demesne. Cheping held it of king Edward. It was then assessed at 6 virgates; now at  $1\frac{3}{4}$  virgates.<sup>1</sup> There is land for 3 ploughs. In (the) demesne is 1 plough; and 4 villeins and 1 bordar have 2 ploughs. There is wood(land) worth 2 swine; and (there are) 5 serfs. It is worth 3 pounds.

fo. 52b.

The King holds LEVINTUN [Lymerston in Brixton]. Ulviet the huntsman held it in parage (*in paragio*). It was then assessed at 1 hide; now at half a hide. There is land for 2 ploughs. There 4 villeins and 2 bordars have 2 ploughs. There are 2 serfs. There is wood(land) for fences. It was, as now, worth 20 shillings.

The King holds SIDE [Shide]. Chetel held it in parage (*in paragio*). (It was) then (assessed) at  $1\frac{1}{2}$  hides; now at 1 hide only. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 8 bordars with 3 ploughs. There are 1 serf, and 4 mills worth 12 shillings and 6 pence, and 4 acres of meadow. There is wood(land) for fences. It was, as now, worth 4 pounds.

William the son of Stur pays for the aforesaid 4 manors 60 pounds, but they are not worth so much.

The King holds SOREWELLE [Shorwell]. Three thegns held it in parage (*in paragio*), and they had three halls. (It was) then (assessed) at  $1\frac{1}{2}$  hides; now at 3 virgates. There is land for 3 ploughs. In (the) demesne are  $1\frac{1}{2}$  ploughs; and (there are) 2 villeins and 8 bordars with 1 plough. There are 6 serfs. There is wood(land) for fences. It was, as now, worth 4 pounds.

The King holds 3 manors, (called) AVREFEL [Atherfield in Shorwell], DUNNIORDE [Dunge-wood in Shorwell], (and) VALPENNE [Walpan in Chale]. Three thegns held them. They were then (assessed) at 3 hides; they are now (assessed) at 1 hide. There is land for 3 ploughs. In (the) demesne are 2 ploughs; and (there are) 1 villein and 10 bordars with 2 ploughs. There are 4 serfs, and 6 acres of meadow. It is, and was, worth 3 pounds, but it pays 7 pounds.

The King holds CHINGESTUNE [Kingston].

Ulvric held it in parage (*in paragio*). (It was) then (assessed) at 1 hide; now at 1 virgate. There is land for 2 ploughs. There 6 bordars have 1 plough. There are 4 acres of meadow. It was, as now, worth 20 shillings, but it pays 30 shillings.

The King holds ALWINESTUNE [Alvington in Carisbrooke]. Donnus held it. (It was) then (assessed) at  $2\frac{1}{2}$  hides; now at 2 hides (only), because the site of the castle occupies (*castellum sedet in*) 1 virgate. There is land for 6 ploughs. There are 8 villeins and 2 bordars with 4 ploughs. There are 2 mills worth 5 shillings, and 6 acres of meadow. It was, as now, worth 3 pounds, but it pays 4 pounds.

### IN CAUBORNE HUNDRET, WHICH LIES IN BOUECOME HUNDRET<sup>2</sup>

II. WALCHELIN, bishop of Winchester, holds CAUBORNE [Swainston in Calbourn]. It was always the minster's. There are 32 hides; but it paid geld T.R.E., as now, for 17 hides only. There is land for 25 ploughs. In (the) demesne are 6 ploughs; and (there are) 27 villeins and 14 bordars with 14 ploughs. There are 11 serfs, and 2 mills worth 6 shillings and 3 pence, and 8 acres of meadow. There is wood(land) worth 20 swine.

Of this land Robert holds 6 hides, Herpul 2 hides, and Alsi  $3\frac{1}{2}$  hides. Seven allodial owners (*alodiarum*) held these of the bishop, and could not betake themselves (*recedere*) elsewhere (or from him).<sup>3</sup> There are  $3\frac{1}{2}$  ploughs; and (there are) 3 villeins and 22 bordars with 5 ploughs. There are 12 serfs, and 15 acres of meadow. Malger holds the church of this manor, with half a hide; and there he has 1 plough with 1 bordar.

The whole manor T.R.E., and afterwards, was worth 16 pounds. That part which the bishop has (is now worth) 30 pounds; but it is farmed (*ad firmam*) for 40 pounds. It cannot, however, bear or pay so high a rent. What the (above) men hold (is worth) 7 pounds, (and) the church 30 shillings.

<sup>2</sup> This heading is of much interest, as implying the existence of sub-hundreds within the two great divisions (east and west) of the Island.

<sup>3</sup> Interlined.

<sup>1</sup> 'pro ii. virgatis i. ferding minus.'



## THE HOLDERS OF LANDS

### WHAT ST. NICHOLAS<sup>1</sup> HOLDS

III. ST. NICHOLAS holds (*habet*) of king William 1 hide in ESELDECOME [Shalcombe near Brook].<sup>2</sup> Alwin forst held it. It was then assessed at 1 hide; now at nothing. There is land for 2 ploughs, which are in (the) demesne with 1 bordar. It was worth 4 pounds; it is now worth 3 pounds.

### WHAT ST. MARY OF LIRE<sup>3</sup> HOLDS

IIII. The abbey of ST. MARY of Lire has in the Isle of Wight 6 churches, to which belong 2 hides and  $2\frac{1}{2}$  virgates of land; and they (*sic*) have 5 villeins, who in different manors hold  $1\frac{1}{2}$  hides less  $\frac{1}{4}$  of a virgate. They<sup>4</sup> have also the tithes of all the King's revenues (*redditionibus*). All that it<sup>5</sup> has (in the Isle) is appraised at 20 pounds. It pays geld for 2 hides and half a virgate of land.

### LAND OF ST. MARY OF WILTUNE

V. The abbey of WILTUNE [Wilton] holds WATINGEWELLE [Watchingwell in Calbourne], which was always the minster's. T.R.E. it was assessed at 3 hides; (it is) now (assessed) at  $2\frac{1}{2}$  hides only, because half (a hide) is in the King's park. There is land for 8 ploughs. There 7 villeins and 12 bordars have 5 ploughs. There is a saltpan, which returns nothing (*sine censu*). There is wood(land) worth 2 swine. The meadow(land) is in the park. It<sup>6</sup> was, and is now, worth 3 pounds. What the King has (is worth) 5 shillings.

### THE LAND OF WILLIAM THE SON OF STUR

#### IN BOUECOMBE HUNDRED

VI. WILLIAM the son of Stur holds CELA [Chale] in demesne of the King. It was held by Chetel in parage (*in paragio*), (and was) then (assessed) at 1 hide; (but) now at 1 virgate. There is land for 1 plough, which is there with 4 bordars who have 1 plough. There are 4 serfs, and 1 acre of meadow.

T.R.E. (it was) and is now worth 40 shillings. When received, it was worth 20 shillings.

The same William holds GADETUNE [Gotten in Chale]. Bruning and his brother held it in parage (*in paragio*). It was then, as now, assessed at 1 hide. There is land for 1 plough, which is there with 2 bordars and 3 acres of meadow. It was, and is now, worth 20 shillings.

The same William holds APLEFORD [in Godshill], and Robert (holds it) of him. Chetel held it in parage (*in paragio*). It was then, as now, assessed at 1 hide. There is land for 2 ploughs. In (the) demesne is half a plough; and (there are) 3 bordars with 1 plough. There are 4 acres of meadow. It was worth 17 shillings; it is now worth 18 shillings.

The same William holds GATECOME [Gatcombe]. Three brothers held it in parage (*in paragio*) of king Edward. It was then assessed at 2 hides; now at 1 hide. Each (of the brothers) had a hall. There is land for 4 ploughs. In (the) demesne are 3 ploughs; and (there are) 6 villeins and 15 bordars with 5 ploughs. There are 6 serfs, and a mill worth 40 pence. There are 26 acres of meadow. There is wood(land) for fences. T.R.E. (it was), and is now, worth 6 pounds. When received, it was worth 100 shillings.

The same William holds WITECOME [Whitcomb in Whitwell]. Godric held it in parage (*in paragio*). (It was) then (assessed) at 1 hide; it is now assessed at nothing. There is land for 1 plough, which is there in (the) demesne, with 3 bordars, and  $2\frac{1}{2}$  acres of meadow. It was worth 10 shillings; it is now worth 15 shillings.

The same William holds CAUBORNE [Westover in Calbourn]. Bolla held it in parage (*in paragio*). It was then assessed at 3 hides less half a virgate; now at  $1\frac{1}{2}$  virgates. There is land for 2 ploughs. In (the) demesne are 2 ploughs; and (there are) 1 villein and 3 bordars with 1 plough. There are 3 serfs and a mill worth 5 shillings and  $2\frac{1}{2}$  acres of meadow. There is wood(land) for (the) fences. T.R.E., and afterwards, it was worth 30 shillings; it is now worth 40 shillings.

The same William holds ULWARCUMBE [ ], and Juran (holds it) of him. He himself held it in parage (*in paragio*) of

<sup>1</sup> St. Nicholas of the castle, Carisbrooke.

<sup>2</sup> Mr. Moody places it in Shorwell, and observes that it 'forms part of the scattered parish of St. Nicholas Castle Hold.'

<sup>3</sup> Abbey of (La vieille) Lyre, Eure.

<sup>4</sup> The churches.

<sup>5</sup> The abbey.

<sup>6</sup> The manor.

## A HISTORY OF HAMPSHIRE

king Edward. It was then, as now, assessed at 1 hide. There is land for 1 plough, which is there with 1 villein and 2 bordars, and a mill worth 35 pence, and half an acre of meadow. It was, and is now, worth 10 shillings.

The same William holds half a hide in EGRAFEL [ ], and Travers (holds it) of William. Ulviet held it in parage (*in paragio*). It was then, as now, assessed at half a hide. There is land for 1 plough, which is in (the) demesne, with 1 bordar, and 1½ acre of meadow. It is worth 10 shillings.

The same William holds CEVREDONE [Cheverton in Brading],<sup>1</sup> and Humfrey (holds it) of him. Turchil held it in parage (*in paragio*). (It was) then, as now, (assessed) at 1 hide. There is land for 1½ ploughs; in (the) demesne is 1 plough; and (there are) 3 villeins and 1 bordar with 1 plough. There is wood(land) for (the) fences. It was worth 20 shillings; it is now worth 30 shillings.

Here, also, the same William holds of the King one villein with half a virgate of land, and 1½ acres of land which Rainald the baker held of earl William (of Hereford). The Earl's bakehouse (*furnus*) was there. It is worth 16 pence; the villein pays 10 shillings per annum.

The same William son of Stur holds HARDELEI [Hardley in Brading].<sup>2</sup> Godric held it of king Edward as an alod (*in alodium*). It was then assessed at 1 hide. It is now assessed at half a virgate. There is one plough (*sic*); and (there are) 3 bordars with half a plough, and 8 serfs. There is a small wood without pannage. It was, and is (now), worth 40 shillings.

fo. 53.

The same William holds ORHAM [ ]. Godric held it of king Edward as an alod (*in alodium*). It then paid geld for half a hide; now for 1 virgate. There is land for 1 plough. In (the) demesne are 1½ ploughs, and (there are) 5 bordars with half a plough. It was worth 40 shillings. It is now worth 20 shillings.

The same William holds WIPINGEHAM

[Whippingham]. Bolla held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1 hide. There is land<sup>3</sup> . . . In (the) demesne is half a plough; and (there are) 3 villeins and 2 bordars with 1 plough. It was, and is now, worth 10 shillings.

The same William holds WITESFEL [Whitfield]; and Rainald (holds it) of him. Chetel held it of king Edward as an alod (*in alodium*). It was then, as now, assessed at 1 hide. There is land<sup>4</sup> . . . In (the) demesne is 1 plough; and (there are) 1 villein and 3 bordars, and 1 serf with half a plough. There is a saltpan worth 14 shillings and 8 pence, and 1 acre of meadow. It is worth 20 shillings.

The same William holds another WITESFEL [Whitfield]. Godric held it of king Edward as an alod (*in alodium*). It then paid geld for 3 hides; now for 1 hide. There is land for 6 ploughs. In (the) demesne are 4 ploughs; and 4 villeins have 3 ploughs. There are 3 mills worth 11 shillings, and 8 acres of meadow. T.R.E. it was worth 4 pounds, and afterwards 3 pounds; it is now worth 7 pounds.

The same William holds ATEHALLE [Hale in Arreton]; and Nigel (holds it) of him. Godric held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a hide. There is land for 1 plough. In (the) demesne is 1 plough and (there are) 1 villein and 4 bordars with 1 plough, and 4 acres of meadow. It is worth 10 shillings.

The same William holds BENESTEDE [Binstead]. Tovi held it, as a manor, of king Edward as an alod (*in alodium*). It then paid geld for 5 virgates; now for 2 virgates. There is land for 2 ploughs, which are there with 2 villeins. It was, and is now, worth 10 shillings.

The same William holds MERESTONE [Merston in Arreton]; and Humfrey (holds it) of him. Bricuin held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a hide. In (the) demesne is 1 plough, with 1 villein. It was, and is now, worth 10 shillings.

The same William holds PRESTETONE [Periton in Arreton]. Tovi held it of king Edward as an alod (*in alodium*). It then, as

<sup>1</sup> Or in Shorwell. Mr. Moody places it in Godshill.

<sup>2</sup> Mr. Moody identifies it as a manor of that name. I do not find it as a place-name on the Ordnance map.

<sup>3</sup> A blank in the MS.

<sup>4</sup> A blank in the MS.



## THE HOLDERS OF LANDS

now, paid geld for 2 hides and  $1\frac{1}{2}$  virgates. There is land for 1 plough. There are 8 villeins with 1 plough, and 4 acres of meadow, and a fishery for (the use of) the hall. There is wood(land) worth 1 pig. It was, and is now, worth 20 shillings.

The same William holds STANDONE [Standen in Arreton]; and Humfrey holds it under him. Bolla held it of king Edward. It then, as now, paid geld for  $1\frac{1}{2}$  hides. There is land . . . In (the) demesne is 1 plough; and (there are) 2 villeins and 3 bordars with 1 plough. It was, and is now, worth 20 shillings.

The same William holds MESSETONE [Messley in Newchurch?].<sup>1</sup> King Edward held it in demesne, and it belonged to his 'farm' (*de firma sua fuit*), and did not pay geld. There is land for 1 plough. In (the) demesne is 1 plough; and (there are) 2 villeins and 1 bordar, and 2 serfs with 1 plough. It was, and is now, worth 20 shillings.

The same William holds ALVRESTONE [Alverstone in Brading], and Tovi (holds it) of him. He himself held it of king Edward. It then, as now, paid geld for 1 hide. There is land for 2 ploughs. There is 1 bordar, and a mill worth 40 pence. It was worth 20 shillings; it is now worth 5 shillings.

### THE LAND OF WILLIAM THE SON OF AZOR

VII. WILLIAM the son of Azor holds BONECERCE [Bonchurch] of the King. Estan held it, as a manor of earl Godwine, as an alod (*in alodium*). It then paid geld for 1 virgate; now for nothing. There is land for half a plough. There are 3 bordars. T.R.E. it was worth 30 shillings; it was afterwards, and is now, worth 20 shillings.

The same William holds LEVEGARESTUN [ ]. Two freemen held it of king Edward as an alod (*in alodium*). It then paid geld for half a hide; now for 1 virgate. There is land for 1 plough, which is there with 9 bordars. It was worth 40 shillings; it is now worth 30 shillings.

The same William holds STANDONE [Standen in Arreton]. Two freemen held it of king Edward as an alod (*in alodium*). It then

paid geld for 5 virgates; now for 1 virgate. There is land for 2 ploughs. In (the) demesne is 1 plough with 1 bordar. Of this land, one Pevrel holds half a virgate, and there he has 1 plough. T.R.E. it was worth 30 shillings, and afterwards 15 shillings. The demesne of William is now (worth) 40 shillings. Pevrel's share is worth 10 shillings.

The same William holds BREILESFORDE [Bridlesford in North Arreton]; and Nigel (holds it) of him. Unlof held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 hide. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 5 villeins and 5 bordars with 4 ploughs. It was worth 20 shillings; (it is) now (worth) 40 shillings.

The same William holds EVRELAND [Yaverland]. Ælmer and Soartin held it of king Edward as an alod (*in alodium*). It then paid geld for 3 hides; now for 1 virgate. There is land for 3 ploughs. In (the) demesne is 1 plough with 8 bordars, and a mill worth 12 shillings. There are  $1\frac{1}{2}$  acres of meadow. It was worth 3 pounds, and afterwards 4 pounds; it is now worth 100 shillings.

The same William holds SELINS [? St. Helens].<sup>2</sup> Algar held it of king Edward. It then paid geld for 1 hide; now for 3 virgates. There is land for 1 plough. In (the) demesne is half a plough; and (there are) 3 villeins and 2 bordars, and 2 serfs with 1 plough. There is wood(land) worth 2 swine. T.R.E. it was, and is now, worth 40 shillings. When it came into possession, it was worth 20 shillings.

The same William holds BERARDINZ [Brading]; and his nephew (holds it) of him. Ælnod held it, as a manor, of king Edward as an alod (*in alodium*). It then, as now, paid geld for three-fourths of a virgate. There is land for half a plough. In (the) demesne is 1 plough with 4 bordars and 1 acre of meadow. There is wood(land) worth 2 swine. It was worth 10 shillings; it is now worth 20 shillings.

The same William holds BORDOURDE [Bordwood in Brading], and BRANDESTONE [Braniston], and LITESLAND [Lesland]. Two freemen (held them), as 2 manors, of king

<sup>1</sup> Mr. Moody's identification. But he places it in Arreton.

<sup>2</sup> This, which is Mr. Moody's identification, does not look probable. There is a 'Sullens' in Arreton.

## A HISTORY OF HAMPSHIRE

Edward as an alod (*in alodium*). Then, as now, they paid geld for 1 hide and 1 virgate. There is land for 2 ploughs; and it is (now all) in one manor. In (the) demesne are 1 villein and 2 bordars with half a plough, and 2 acres of meadow.

Of this land, William's nephew holds 1 virgate, and Pevrel holds half a hide<sup>1</sup> and 1 virgate. The whole was worth T.R.E. 30 shillings, and afterwards 20 shillings; it is now worth 16 shillings.

The same William holds 10 acres in BOCHEPONE [Blackpan in Brading], where is 1 bordar. It is worth 3 shillings.

The same William holds SCALDEFORD [Scottlesbrook in Godshill].<sup>2</sup> Osgot held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1 virgate. There is land for 1 plough (which is in demesne) with 3 villeins. There is wood(land) worth 2 swine. It was worth 16 shillings; it is now worth 10 shillings.

The same William holds WITESTONE [Winston], and William and Richard (hold it) of him. Elmer held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 hide. There is land for 2 ploughs. In (the) demesne is 1 plough with 3 villeins. It was worth 30 shillings; it is now worth 20 shillings.

The same William holds BENVESLEI [Barnsley in Brading], and Roger (holds it) of him. Ulnod held it of king Edward. Then, as now, it paid geld for half a hide. There is land for 1 plough. There is 1 bordar. It was worth 10 shillings; it is now worth 7 shillings.

The same William holds RODEBERGE [Rowborough in Brading].<sup>3</sup> The abbot of Wincestre held it, of king Edward, as an alod (*in alodium*). Then, as now, it paid geld for 1 virgate. There is land for 1 plough, which is in the demesne with 1 villein and 2 bordars and half a plough. It was worth 5 shillings; it is now worth 20 shillings.

The same William holds LAMORE [

], and Anschitil (holds it) of him. Three freemen held it of king Edward. It then, as now, paid geld for half a hide. There is land for 1 plough. In (the) demesne is 1 plough; and (there are) 5 bordars with half a plough. It was worth 30 shillings; it is now worth 20 shillings.

The same William holds AVICESTONE [Aviston<sup>4</sup> in Brading]. Godric held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1½ virgates. There is land for 1 plough. A vavasor, who has 2 cows, dwells here. It was, and is now, worth 10 shillings.

The same William has a piece of land in the island, which renders 3 ploughshares.<sup>5</sup>

fo. 53b.

ALSO WILLIAM son of Azor holds MODRESTAN [Mottiston] of the King. Four thegns held it in parage (*in paragio*). (It was) then (assessed) at 2 hides; now at 2½ virgates. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 7 serfs and 7 bordars with 1 plough, and 16 acres of meadow. T.R.E. it was worth 10 pounds; it was afterwards, as now, worth 6 pounds.

The same William holds SEUTECOME [Combe].<sup>6</sup> Leving held it in parage (*in paragio*). (It was) then (assessed) at 1 hide; now at half a virgate. There is land for 1 plough. There are 2 bordars and 2 serfs, and a mill and 2 acres of meadow. It is worth 40 shillings.

The same William holds half a hide in HAMESTEDE [Hamstead], and Nigel (holds it) of him. Alvríc held it in parage (*in paragio*). (It was) then, as now, (assessed) at half a hide. There is land for 1 plough; and it is there with 2 villeins and 2 bordars. It was, and is (now), worth 20 shillings.

The same William holds half a hide in CELATUNE [Chilton], and William Forist (holds it) of him. Alvríc held it in parage (*in paragio*). It was then, as now, assessed at

<sup>4</sup> I do not find it there on the Ordnance map.

<sup>5</sup> In the margin here is the word 'R[e]-q[uire],' referring to the following continuation of William's fief, which is entered on the next page.

<sup>6</sup> This is Mr. Moody's identification. The name suggests to me Sharcombe in Shorwell, which is not marked on the Ordnance map.

<sup>1</sup> 'Half a hide and' underlined as if for deletion.

<sup>2</sup> Mr. Moody's identification.

<sup>3</sup> This is clearly the farm of that name. Mr. Moody makes it 'Rowbury in Carisbrook.'



## THE HOLDERS OF LANDS

half a hide. There is land for 1 plough. It was worth 10 shillings; it is now worth 5 shillings.

The same William holds 1 hide and 1 virgate in SIDA [Shide]. Ednod held it in parage (*in paragio*). (It was) then (assessed) at 5 virgates; now at 3 virgates. There is land for 3 ploughs. In (the) demesne there is nothing; but (there are) 15 bordars and 4 serfs with  $1\frac{1}{2}$  ploughs. There are a mill worth 10 shillings and 2 acres of meadow. There is wood(land) for fences. T.R.E., and afterwards, it was worth 40 shillings; it is now worth 60 shillings.

The same William holds 1 hide in FRESCEWATRE [Prior's Freshwater], which pays geld for that amount, and (is held) by Roger of him. It was held, in the manor of Frescewatre, by one of Tosti(g)'s reeves. There is land for 1 plough, which is in (the) demesne with 3 bordars. T.R.E. it was, as now, worth 40 shillings. When received, it was worth 20 shillings.

The same William holds 1 virgate in CELERTUNE [Chillerton in Carisbrooke and Gatcombe], which is assessed at that amount and (is held) of him by Geoffrey. Blacheman held it in parage (*in paragio*). There is land for 1 plough, which is in (the) demesne with 2 bordars and 1 serf. It was worth 20 shillings; it is now worth 30 shillings.

fo. 53.

### THE LAND OF GOZELIN THE SON OF AZOR

VIII. GOZELIN the son of Azor holds SCALDEFORD [Scottlesbrook in Godshill]<sup>1</sup> of the King. Osgot held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 1 virgate. There is land for 1 plough, which is in (the) demesne. Azor holds (it) of Gozelin. T.R.E. it was worth 40 shillings, and afterwards 20 shillings; it is now worth 30 shillings.

The same Gozelin has a piece of land in the isle, which renders 3 ploughshares.

The same GOZELIN holds RODE [Rowde in Godshill]. Alnod held it of king Edward as an alod (*in alodium*). It then paid geld for 3 hides; now for  $5\frac{1}{2}$  virgates of land. There is land for 6 ploughs. In (the) demesne are 2 ploughs; and (there are) 6 bordars and 4 serfs, with 1 plough and 4 acres of meadow.

Of this manor, Azor holds 1 virgate, Sawin half a hide and one-fourth of a virgate, and Nigel three-fourths of a virgate. In (the) demesne is 1 plough; and (there are) 1 villein and 2 bordars with 1 plough. The whole was worth T.R.E. 9 pounds, and afterwards 8 pounds; it is now worth 8 pounds 10 shillings.

The same Gozelin holds SENCLIZ [Shanklin]. Six freemen held it of king Edward as an alod (*in alodium*). It then paid geld for  $3\frac{1}{2}$  hides; now for  $5\frac{1}{2}$  virgates of land. There is land for 5 ploughs. In (the) demesne are 2 ploughs; and (there are) 4 villeins and 2 bordars, and 2 serfs with 2 ploughs.

fo. 53b.

Of this manor, Livol holds 1 hide, and there he has 2 bordars with half a plough. The whole T.R.E. was worth 8 pounds, and afterwards 6 pounds; it is now worth 7 pounds.

The same Gozelin holds WERISTETONE [Winston]. Three freemen held it of king Edward as an alod (*in alodium*). Then, as now, it paid geld for 2 hides and 3 virgates and the third part of a virgate. There is land for 4 ploughs. This land is held of Gozelin by (these) four men, William, another William, Geoffrey, and Douenold. One plough is in (the) demesne. The whole T.R.E. was worth 100 shillings; it was afterwards, and is now, worth, amongst (them) all, 50 shillings.

The same Gozelin holds SIDA [Shide] of the King. Ednod held it of king Edward. It was then assessed at 2 hides less 1 virgate; now at  $1\frac{1}{2}$  hides. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 3 villeins and 2 bordars with  $1\frac{1}{2}$  ploughs. There are 3 serfs, and 2 mills worth 5 shillings, and 2 acres of meadow. T.R.E. it was, and is now, worth 50 shillings. When received, it was worth 40 shillings.

The same Gozelin holds 1 virgate in CELERTUNE [Chillerton in Carisbrooke and Wootten], and Geoffrey holds it of him. Blacheman held it in parage (*in paragio*). (It was) then, as now, (assessed) at 1 virgate. There is land for 1 plough, which is in (the) demesne. It was, and is now, worth 10 shillings.

The same Gozelin holds SOREWELLE [Shorwell]. Ulnod held it in parage (*in paragio*). (It was) then (assessed) at 2 hides and 1 vir-

<sup>1</sup> Mr. Moody's identification.

# A HISTORY OF HAMPSHIRE

gate; it is now assessed at half a hide. There is land for  $2\frac{1}{2}$  ploughs. In (the) demesne is 1 plough; and (there are) 2 villeins and 6 bordars with  $1\frac{1}{2}$  ploughs. There are 3 serfs, and a mill worth 40 pence, and 14 acres of meadow. T.R.E., and afterwards, it was worth 100 shillings; it is now worth 4 pounds.

The same Gozelin holds SELDEFLET [Shal-fleet]. Edric held it T.R.E., and it was then assessed at 6 hides; (it is) now (assessed) at 3 hides and half a virgate. There is land for 14 ploughs. In (the) demesne are 2 ploughs; and (there are) 14 villeins and 19 bordars with  $9\frac{1}{2}$  ploughs. There are a mill worth 11 pence, and 4 acres of meadow; also a church. There is wood(land) worth 20 swine.

Of this land, Geoffrey holds  $2\frac{1}{2}$  virgates; and there is there 1 plough with 2 villeins and 1 bordar; and Turgis holds half a hide. Liof holds 1 hide. These (two) have 2 ploughs in (the) demesne; and 2 villeins and 2 bordars with half a plough. The whole was worth, T.R.E. and afterwards, 20 pounds; it is now worth 15 pounds amongst (them) all.

The same Gozelin holds HAMESTEDE [Hamstead]. Alvríc held it in parage (*in paragio*). (It was) then, as now, (assessed) at half a hide. There is land for 1 plough. There are 2 serfs and 1 villein with half a plough. It was, as now, worth 20 shillings.

The same Gozelin holds ULVREDESTUNE [Woolverton].<sup>1</sup> Alvríc held it in parage (*in paragio*). (It was) then, as now, (assessed) at 1 hide. There is land for 2 ploughs. In (the) demesne are  $1\frac{1}{2}$  ploughs; and (there are) 1 villein and 3 bordars with 1 plough. There are 4 serfs, and 1 acre of meadow. It was, and is now, worth 60 shillings. Turald holds it of Gozelin.

The same Gozelin holds half a hide in CELATUNE [Chilton in Brixton]. Alvríc held it; and it was then, as now, assessed at half a hide. There is land for 1 plough, which is there, with 2 villeins and 4 acres of meadow. It was, as now, worth 10 shillings.

## LAND OF THE KING'S THEGNS

IX. GODRIC the priest holds MELEVSFORD [ ] of the King. He himself held it of king Edward in parage (*in paragio*). It was then, as now, assessed at  $1\frac{1}{2}$  virgates. There is land for half a plough; but in (the) demesne is 1 plough with 1 bordar, and (there are) a mill, which returns nothing (*sine censu*), and  $1\frac{1}{2}$  acres of meadow. It was, and is now, worth 10 shillings.

ALSI the son of Brisci holds TORLEI [Thorley]. Earl Tosti(g) held it. It was then assessed at 3 hides; now at 2 hides. There is land for 7 ploughs. In (the) demesne are 2 ploughs; and (there are) 10 villeins and 11 bordars with 6 ploughs. There are 7 serfs, and 6 acres of meadow. T.R.E., and afterwards, it was worth 8 pounds; it is now worth 12 pounds.

ALVRIC held, and (now) holds, 1 hide in ESSUETE [Sheat in Gatcomb], and it is assessed at that amount. There is land for half a plough. In (the) demesne is 1 plough; and (there are) 2 serfs and 1 bordar, and a mill which returns nothing (*sine censu*). It was worth 10 shillings; it is now worth 15 shillings.

ULNOD held, and now holds, ALALEI [ ] T.R.E.; as now, it paid geld for 1 virgate. In (the) demesne is half a plough. It was worth 7 shillings; it is now worth 5 shillings.

HERBRAND holds LEPENE [Pann in Carisbrooke] of the King. Godric held it of king Edward. It then, as now, paid geld for 1 hide. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 4 villeins with 2 ploughs. There are 2 acres of meadow. There is wood(land) without pannage. It was worth 4 pounds; it is now worth 3 pounds.

EDRIC holds AVICESTONE [Aviston in Brading]. He himself held it of king Edward. It then, as now, paid geld for half a virgate. There is land for half a plough, which is in (the) demesne, with 2 bordars and 2 serfs. It was, and is now, worth 5 shillings.

OIRANT holds CELVECROTE [ ]. His father held it of king Edward; and it then, as now, paid geld for half a virgate. In (the) demesne is half a plough with 1 bordar. It was, and is (now), worth 5 shillings.

<sup>1</sup> Woolverton in Shorwell or Woolverton in Brading.



## THE HOLDERS OF LANDS

ALSI holds ABAGINGE [ ] of the King. He himself held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for 1 virgate. There is land for half a plough, and half an acre of meadow. It was worth 5 shillings; it is now worth 3 shillings.

ULWARD holds WITINGEHAM [Whippingham]<sup>1</sup> of the King. He himself held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a hide. In (the) demesne is half a plough with 3 bordars. It was, and is now, worth 10 shillings.

ALRIC and his nephew hold HOTELESTONE [Nettleston in St. Helen's] of the King. They themselves held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for a third of a hide. There is land for half a plough, which is in (the) demesne. It was, and is now, worth 5 shillings.

HUMFREY holds a third of a hide in HOTELESTONE [Nettleston in St. Helen's] of the King. Godesa held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for a third of a hide. There is land for 3 ploughs. In (the) demesne is 1 plough, and (there are) 2 acres of meadow. It was worth 60 shillings; it is now worth 20 shillings.

EDWI holds APLEDEFORDE<sup>2</sup> [ ], and also held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a hide. There is land for 1 plough. In (the) demesne is half a plough with 1 bordar and 2½ acres of meadow. It was worth 20 shillings; it is now worth 10 shillings.

fo. 54.

SOARTIN holds DRODINTONE [ ] of the King. He and another freeman held it of king Edward as an alod (*in alodium*). It then paid geld for 1½ hides, less a third of a virgate. In (the) demesne is half a plough; and (there are) 1 villein and 1 bordar with 1 plough.

Of this manor, William rents (*tenet ad firmam*) two-thirds of a hide, where he has 1 plough. It [the manor] was worth 32 shillings; it is now worth 42 shillings.

GODRIC holds Ovingefort [Horrington in

Arreton]<sup>3</sup> of the King. He himself held it of king Edward. It then, as now, paid geld for 1 virgate. There 1 villein has half a plough. It is worth 40 pence.

TOVI holds, as a gift from the King (*de dono regis*) half a virgate in CHENISTONE [Knighton]. Bondi held it of king Edward as an alod (*in alodium*). It then, as now, paid geld for half a virgate. There is 1 villein. It was, and is now, worth 3 shillings.

### IN HEMRESWEL HUNDRET

ALVRIC and Wislac have 1 hide and 2½ virgates in ERMUD [Yarmouth]. They themselves held it in parage (*in paragio*) of king Edward. It was then, as now, assessed at 1 hide and 2½ virgates. There is land for 2 ploughs. There 7 villeins and 2 bordars have 2 ploughs. It was worth 12 shillings; it is now worth 25 shillings.

ULNOD and Bruning have half a hide in SOETE [Sheat in Gatcomb]. They themselves held it in parage (*in paragio*). (It was) then, as now, (assessed) at half a hide. There is land for 1 plough. There 3 villeins have 1 plough, and a mill worth 40 pence, and 2 acres of meadow. It was, and is now, worth 10 shillings.

GERIN has 1 hide in LENIMCODE [ ]. King Edward had it among the sources of his 'farm' (*in firma sua*). (It was) then, and is now, (assessed) at 1 hide. There is land for 4 ploughs. In (the) demesne is 1 plough; and (there are) 6 villeins and 10 bordars with 3 ploughs. There is half an acre of meadow. There is wood(land) for (the) fences. It was worth 6 pounds; it is now worth 7 pounds.

### IN BOVECOME HUNDRET

ULSI holds half a hide in CELA [Chale]. He himself held it of king Edward in parage (*in paragio*). (It was) then, as now, (assessed) at half a hide. There is land for 1 plough. In (the) demesne is half a plough; and 2 bordars have half a plough, and 1 acre of meadow. It is worth 10 shillings.

GODRIC holds half a hide of the King in HUNCHEFORD [ ]. He himself held it T.R.E. It was then, as now, assessed at half a hide. There is land for 1 plough.

<sup>1</sup> Mr. Moody's identification.

<sup>2</sup> Apleford in Godshill.

<sup>3</sup> Mr. Moody identifies it as a manor of that name. I do not find it as a place-name on the Ordnance map.

## A HISTORY OF HAMPSHIRE

In (the) demesne is half a plough with 1 bordar and a mill, which returns nothing (*sine censu*), and 1 acre of meadow. It was, and is now, worth 10 shillings.

ELNOD holds 1 hide of the King in LEVIN-TUNE [Lymerston in Brixton]. He himself held it in parage (*in paragio*) T.R.E. (It was) then, as now, (assessed) at 1 hide. There is land for 1 plough. In (the) demesne is half a plough with 2 bordars. It was worth 10 shillings; it is now worth 12 shillings.

ULNOD holds of the King half a virgate, and it was assessed T.R.E., as now, at that amount. There is land for half a plough. There is 1 bordar. It is worth 30 pence.

ALVRIC and Wislac hold half a hide in HECEFORD [ ], and it was T.R.E., as now, assessed at that amount. Four allodial owners (*alodiarum*) held it in parage (*in paragio*). There is land for 1 plough. In (the) demesne is half a plough; and 5 bordars have 1 plough and half an acre of meadow. It was, and is now, worth 10 shillings.

BOLLE holds of the King 1 virgate in APLEFORD [Apleford]. It was T.R.E., as now, assessed at that amount. There is land for 1 plough, which is there in (the) demesne with 3 serfs; and there (are) 5 acres of meadow. It was, and is now, worth 10 shillings.

### NOTE

Warblington is surveyed, not under Hampshire, but under Sussex, where it figures as an

appurtenance of (West) Bourne (fo. 23*b*) a manor of Earl Roger (of Shrewsbury) :—

The same earl holds in demesne BORNE. Earl Godwine held it . . .

To this manor belongs Warblitetone [Warblington] in Hantescire. T.R.E. it was assessed at 12 hides; now at 4 hides. There is land<sup>1</sup> . . . In (the) demesne are two ploughs, and (there are) 17 villeins and 12 bordars with 5 ploughs. There are 2 churches, and 6 serfs, and 1 mill worth 10 shillings.

In addition to this entry there is one, under Hampshire, on 'Neutibrige' (fo. 44*b*), which, though not hitherto identified, relates to NYTIMBER—'Newetymbre' in the *Nomina Villarum* (1316)—formerly a tithing in Warblington, of which the name seems to have died out at a comparatively early period. As 'Neutibrige' was assessed at 3 hides, we have a total assessment of 15 hides for Warblington before the Conquest.

There are also under other counties allusions to the Isle of Wight. With one of these, in the Wiltshire Survey (fo. 64*b*), I have dealt in the Introduction (p. 406); another and a somewhat mysterious entry relates to the King's manor of Sheepshed, Leicestershire, of which it says: "from this land come 6 pounds of rent (*ad firmam*), by direction of the bishop of Bayeux, for the service (*servitio*) of the Isle of Wight" (fo. 230*b*).

---

<sup>1</sup> A blank in the MS.



## THE SURVEY OF WINCHESTER *TEMP. HENRY I*

The 'Winton Domesday,' as it is usually but incorrectly termed, consists of two distinct documents, of which the text is preserved only in a MS. belonging to the Society of Antiquaries. The first of these, which records a Survey in the days of Henry I., occupies twelve leaves in double column; the second, occupying twenty leaves, is concerned with a Survey taken, by order of bishop Henry of Blois in 1148. The text of these two Surveys is printed in the fourth ('Additamenta') volume of the Record Commission's edition of Domesday Book (pp. 531-562).<sup>1</sup> As there is no survey of Winchester in Domesday Book itself, the earlier of these two documents supplies, to some extent, its lack, and possesses, in many ways, a considerable interest and value. The existing text appears to be a copy made from the original return, and was probably written shortly before 1148.<sup>2</sup> This, unfortunately, is too corrupt and, consequently, too obscure for satisfactory translation, but it is possible to explain the chief features of what is virtually a unique document.

The first point to determine is the date at which the Survey was made. From the document itself we learn the names of the officers charged with its superintendence, namely, William (Giffard) the bishop, Herbert the chamberlain, Ralph Basset, Geoffrey Ridel, and William de Pont de l'Arche. Sir Henry Ellis argued, in the Record Commission's edition, that as bishop William 'was consecrated in 1107,' and died in 1128, the Survey was made between these years. Dean Kitchin, however, narrowed this limit, observing that 'William Giffard was not bishop till 1107, and Geoffrey Ridel perished in the White Ship in 1119; the date lies between these points.'<sup>3</sup> From evidence known to me I am quite satisfied that, contrary to the later practice, the bishops consecrated in 1107, but appointed some years earlier, were formally styled bishops (not bishops-elect) before their consecration. As bishop William had been given the see so far back as 1100, this overthrows the limit '1107'; but bishop Roger of Salisbury, who is also mentioned in the Survey, was not appointed till the year 1103, which is therefore the earliest date for the Survey. On the other hand, the White Ship was lost, not in 1119, but towards the close of 1120. This, however, is of

<sup>1</sup> The introduction to it will be found on p. xv. of that volume.

<sup>2</sup> Such is the opinion of Mr. G. F. Warner, of the British Museum, who was good enough to examine it specially for the purpose.

<sup>3</sup> *Winchester* ('Historic Towns Series'), p. 73.

## A HISTORY OF HAMPSHIRE

little consequence, for the real limit of latest date is found in the name of 'Bernard chancellor of the Queen,' who is entered as holding a house, and who became bishop of St. David's in 1115. The Survey, therefore, cannot be later than 1115 or earlier than 1103. I am inclined to assign it to the latter half of these twelve years.

The only document at all parallel that can be cited here for comparison is the Survey of Gloucester and of Winchcombe in an Evesham cartulary, which has been assigned to 1100 or thereabouts.<sup>1</sup> As with these Gloucestershire Surveys, that of Winchester takes for its standard 'the time of king Edward'; and, like them, it seeks to establish what *gafol* had then been received by the king in his seignorial capacity, that is, from the houses in his 'demesne.' For in the large towns, just as in the shire, there was a certain portion which was 'king's land' from which he received a revenue as lord, while from the rest, which was held by his barons and other folk, he received, as king, the tax so prominent in Domesday as 'geld' with certain other dues. In Domesday itself the entry on Southampton similarly contrasts the render from the tenants on the king's demesne in the days of Edward the Confessor and at the date of the Survey.

Thus it is that this Survey of Winchester styles itself 'the book of the king's lands rendering land-gafol (*Langabulum*) and *Brug*' in Winchester as they used to render it in the time of king Edward.' It is particularly interesting to find that the king's tenants at Southampton are similarly entered in Domesday (fo. 52) as rendering '£7 of land-gafol' (*de gablo terre*). The actual word used in the Winchester Survey is employed by Domesday in its quasi-English form ('Landgable') at Cambridge, Huntingdon, and Lincoln. I have discussed at considerable length in *Domesday Studies* (I. 136-142) the nature of this 'gafol' (*gablum*), which was a fee-farm rent received from the tenants of burgages within the king's *dominium*. It was distinct from the rental value of houses—which Domesday styles 'locatio' (fo. 336)—and at Winchester indeed was of small amount as compared with that value. The second entry in the local survey shows us Edwin Godeswale holding T.R.E. a house from which only sixpence 'de langabulo' was due, though its rent, apparently, was twenty shillings.<sup>2</sup> In the Survey of 1148 we find house after house entered as liable to pay sixpence a year to the king. At Southampton, according to the Domesday Survey, out of seventy-nine burgesses, twenty-seven paid for land-gafol eightpence a year, and fifty paid sixpence. The latter amount, therefore, was usual; but it is strange to find houses so valuable as these in the High Street of Winchester charged only with the lower of these two sums.

<sup>1</sup> See Cott. MS. Vesp. B, xxiv., fos. 53-5. Printed by Sir Henry Ellis in *Introduction to Domesday*, II. 446; by Mr. A. S. Ellis in *Bristol and Glouc. Arch. Soc.'s Trans.*, Vol. IV.; and, in a translated form, by Mr. W. H. Stevenson in *Rental of Gloucester*, p. ix.

<sup>2</sup> The holding in the first entry of all is given as 'ii. domu[m]', the text being probably corrupt, and 'ii.' an error for 'i.'





FRONT COVER OF THE 12TH CENTURY MS. KNOWN AS THE WINTON DOMESDAY, IN THE LIBRARY OF THE SOCIETY OF ANTIQUARIES.





## THE SURVEY OF WINCHESTER

At a later date we find, in the Winchester consuetudinary, further payments of the nature of 'gafol.' Every tanner who has a 'board' (*i.e.* on trestles) in the High Street has to pay the clerk a penny for 'tangable,' every woman selling butter or lard a penny for 'smeargable' (*smergable*), every shoe-maker selling new shoes of cow-leather a penny for 'shoe-gable' (*scogable*).<sup>1</sup> As to the *Brug* or *Brueg* of the Survey, I can offer no explanation. Mr. W. H. Stevenson, whose opinion must carry great weight, informs me that it means 'brew-gafol' and was a due on brewing; but I cannot find any evidence that such a due existed at Winchester as payable, like land-gafol, from the king's tenants in demesne. The interesting verdict by sworn jurors *circiter* 1280 records in great detail the sums paid 'de Langablo' in each street, like our Henry I. Survey, but it makes no mention of *Brug* (or *Brueg*) or of any due arising from brewing or from beer.<sup>2</sup>

The Survey, of which the heading is given above, describes as follows its origin and its method:

King Henry wishing to know what king Edward had altogether (*omnibus modis*) at Winchester in his demesne, ordered that this should be established (*comprobari*) by the oath of his burgesses. For he wished to have thence the full amount that<sup>3</sup> king Edward had from it in his time. This oath, therefore, was made by eighty-six of the principal (*melioribus*) burgesses of Winchester in the presence of William bishop of Winchester and Herbert the chamberlain and Ralf Basset and Geoffrey Ridel and William de Pont de l'Arche. The burgesses, therefore, having made oath, began to enquire (as to) this up and down (*ethergingis*) from the east gate.<sup>4</sup>

The magnates before whom the burgesses took the oath<sup>5</sup> were, independently of the bishop, trusted officers of the king. Herbert the chamberlain was either the Hampshire tenant-in-chief in Domesday<sup>6</sup> or his son and namesake; he held houses in Winchester himself, and one is entered in the Survey as held by his 'dapifer' or steward. Ralf Basset and Geoffrey Ridel were both of them justices much employed by Henry I., and William de Pont de l'Arche is found towards the end of the reign the most prominent official in Hampshire. He was sheriff in 1129 and 1130 and was then buying offices and wardships from the Crown for large sums; he was also farming the 'chapmen's hall' in Winchester itself, and was collecting the heavy annual aid due from the city, one-twelfth of which was due from his own land there.<sup>7</sup>

The principle on which the city was surveyed by the sworn selected burgesses, has not, it would seem, been grasped. They first surveyed the king's demesne on the north side of the High Street from east to west, and then that on the south side from west to east. Then they began over again and surveyed the houses of the 'barons and tenants' on the north and south sides of the High Street in the same order.<sup>8</sup> These were com-

<sup>1</sup> *Archæological Journal*, IX. 74.

<sup>2</sup> *Ibid.*, VII. 374-383.

<sup>3</sup> The MS. has 'sed,' apparently in error for 'quod.'

<sup>4</sup> See the facsimile for the Latin text.

<sup>5</sup> Compare *Feudal England*, p. 133.

<sup>6</sup> See pp. 425, 499 above.

<sup>7</sup> See, for all this, the Pipe Roll of 31 Hen. I.

<sup>8</sup> The break is found on p. 534 (col. 2):—"Hic de domibus existentibus in cons[ue-"]

## A HISTORY OF HAMPSHIRE

paratively few in number. After this they summed up the result of their survey, so far, as showing that in 'Hest[re]dinges' king Edward had received dues from sixty-three burgesses, twelve of whom had (under the Conqueror) been evicted, to make room for that 'king's house' or palace, which, as we know from other sources,<sup>1</sup> had encroached also on the New Minster. Of the fifty-one remaining the king received his dues from eighteen only.<sup>2</sup> The loss which the Crown had thus sustained was a frequent incident of the Conquest and of the turmoil and trouble that it caused,<sup>3</sup> and its detection, we have seen, was avowedly the cause of this survey being made.

After they had thus disposed of the High Street, the burgesses passed through the west gate and surveyed the extensive suburb which lay outside it. Then they returned within the walls and perambulated in succession the streets running north from the High Street—Suithelingastret, Bredenestret, Scowertenestret, Alwarenestret, Flesmangerestret, Wenegenestret, Tannerestrete, and Bucchestret near the East Gate. Lastly they similarly took those to the south of the High Street—Calpestret, Goldestret, and Gerestret.<sup>4</sup> As does, sometimes, Domesday itself, this Survey records the rents at which the houses were let as well as the sums due from them to the Crown. Although varying greatly in amount, these rents were often as high as those of a manor, far higher indeed than might have been expected. On the north side of the High Street, towards West Gate, we have two houses rented at £4 each and one at £3 12s. od.; nor were their tenants men, to judge from their names, of prominence. It is difficult to say, with any definiteness, what such sums then represented, but a man's wages, in the twelfth century, were about one-thirtieth, in nominal amount, of what they are now. That Winchester, as befitted the king's capital, was then a wealthy city is proved by its paying annually as 'aid' the sum of £80. This was only exceeded by London's £120, nor was it even approached by any town but Lincoln, which paid £60.<sup>5</sup> This 'aid' corresponded to the danegeld paid by a shire, and is doubtless referred to by the Winton Survey in its frequent references to the 'geld.'

The most difficult and the most important question raised by this Survey is the character and origin of 'the cnihts' hall.' The facts, so far as I know, have never been clearly stated. In the first place, the Survey made under Henry I. mentions, apparently near the east gate on the north side of the High Street, the cnihts' hall ['Chenictenhalla'], 'where the "chenictes" used to drink their gild, and they held it freely from

tudine] T.R.E. Et supra eius terram finit. Modo incipit de terris Baronum et Tentium (sic) a porta Orientis usque ad portam Occidentis."

<sup>1</sup> See Domesday text, pp. 470, 471.

<sup>2</sup> 'Summa in Hest[re]dinges. In hoc vico habuit rex Edwardus lxxiii. Burgenses reddentes consuetudines. Postea fuerunt vastati xii. quia [qr'] in eorum terris fuit facta domus Regis, et de aliis non habet rex consuetudines nisi de xviii,' etc. (p. 535).

<sup>3</sup> See p. 404.

<sup>4</sup> See, for all these names, p. 537 below.

<sup>5</sup> Maitland's *Domesday Book and Beyond*, p. 175.





END COVER OF THE 12TH CENTURY MS. KNOWN AS THE WINTON DOMESDAY, IN THE LIBRARY  
OF THE SOCIETY OF ANTIQUARIES





## THE SURVEY OF WINCHESTER

king Edward.' This hall, at the time of the Survey, was in the hands of two Englishmen, who claimed to have the king's writ giving them possession (p. 531). Towards the other end of the High Street, and also on its north side, we find another *cnihts'* hall, of which we read:— 'Chenictes used to hold "lachenictahalla" freely of king Edward; Roger Fitz Gerold holds it now . . . and it pays (*reddit*) £6 2s. od.' (p. 533). This, therefore, was a house of quite exceptional value. If we now turn to the later Survey of 1148, we find no mention of these *cnihts'* halls, but we read, instead, under Colebrook Street, that 'the "Hantachenesele"<sup>1</sup> used to be there, where the good men (*probi homines*) of Winchester drank their gild, and it has remained in the king's hands' (p. 556). Dean Kitchin, the only writer, it seems, who has made a study of these Surveys, holds that 'This "Hantachevesle" was probably the Guild Hall of the merchants halfway up High Street.'<sup>2</sup> But in the map accompanying his text, the 'Hantachevesle' is placed in the south-east of the city, near St. Peter Colebrook. Moreover, I find in this later Survey mention of what seems to be an actual Guildhall ('Gihalla,' 'Gihald').<sup>3</sup> It has, apparently, escaped notice that the question is further complicated by the appearance of a 'chapmen's hall' at least as early as the year 1129; for at Michaelmas, 1130, the sheriff accounts for £13 6s. 8d. 'blanch' as the year's rent of 'chepmanesela.'<sup>4</sup> This same rent is accounted for annually on the rolls of Henry II., and at least on one occasion by 'the men of Chepmanessela.'<sup>5</sup> In a fragment of a Winchester Survey which I assign to 1212,<sup>6</sup> we read, evidently of this house:—'King John has given to William his tailor (*Tailatori*) a certain house on his demesne in Winchester, which is called Chapmannes-halle.'<sup>7</sup> This house is further identified by the Edward I. Survey (*circ.* 1280) as "a certain large house in which are sold linen cloths in Winchester," and which "king John gave to William his tailor (*cissori suo*)" for an annual render of a grey (fur) *pelisse*.<sup>8</sup> Only local knowledge and research could determine which, if any, of these buildings corresponded with the later hall of the merchant-gild, known as the Guild Hall, at the corner of Calpe Street and High Street. In Dr. Gross's valuable work on the gild-merchant, he quotes (II. 37), from Somner's *History of Canterbury*, the remarkable agreement between the '*cnihts*' of the chapman-gild<sup>9</sup> of Canterbury, which was slightly earlier than the

<sup>1</sup> Misprinted 'Hantachevesle' in the Record Commission's edition.

<sup>2</sup> *Winchester* ('Historic Towns Series'), p. 75. The site referred to is that of the later Guild Hall.

<sup>3</sup> pp. 545 *bis*, 546.

<sup>4</sup> Pipe Roll 31 Hen. I., p. 40. The termination recalls the English form 'sele,' which also appears in the 'Hantachenesele,' and which, Mr. W. H. Stevenson points out to me, is "related to German *saal*, whence French *salle* and *salon*" (and our derivative, *saloon*).

<sup>5</sup> In 1159 (5 Hen. II.) they account for two years' rent, £1 9s. 6d., being allowed them for repairs to a stall (*selde*). The name occurs also as 'chapmannishala,' 'chapmanneshala,' etc.

<sup>6</sup> See *The Commune of London and other studies*, p. 272.

<sup>7</sup> *Testa de Nevill*, p. 236.

<sup>8</sup> *Archæological Journal*, VII. 375.

<sup>9</sup> 'than *cnihtan* on Cantwareberig of cepmannegilde.'

## A HISTORY OF HAMPSHIRE

Winton Survey. This appears to prove at least that the ‘chenictes’ of Winchester might, after all, have been members of a chapman-gild, that is, of a merchant-gild as it was later termed. On the other hand, at Nottingham, Domesday distinguishes the ‘mercatores’ from the ‘equites,’ so that no positive conclusion on this subject would be safe. The importance at Winchester, in early times, of the merchant-gild (*gilda mercatoria*)<sup>1</sup> renders it a matter for much regret that one cannot detect it definitely in either of these Surveys.

All these gilds, however, have a common factor in beer. The ‘chenictes’ of the earlier Survey, and the ‘good men’ of the later one alike ‘drank’ their gild, and when the merchant-gild was in full swing, its members ‘drank’ that also.<sup>2</sup> St. Anselm, as Dr. Gross reminds us, denounced from Bec the English monk, who drank in Gilds with the drunkards, and forbade his further attendance at Gilds and places where they drink.<sup>3</sup> Walter Map the satirist speaks, in the twelfth century, of the drinking places called in the English tongue ‘Ghild-hus,’<sup>4</sup> and Gerald of Wales, one may add, asserts, as a matter of course, that the Guildhall in London was so called from men meeting there to drink.<sup>5</sup> ‘We have,’ says Mr. Maitland, writing of our Anglo-Saxon forefathers, ‘to provide for men who love to drink themselves drunk with beer . . . And who shall fathom that ocean? “Multum biberunt de cerevisia Anglicana,” as the pope said<sup>6</sup> . . . It becomes a serious question whether we can devote less than a third of the sown land to the provision of drink.’<sup>7</sup>

Apart from these interesting cnichts’ halls and the ‘king’s house’ spoken of above, the Survey mentions the house of queen Emma (mother of Edward the Confessor) who had been closely associated with the city, and the shops (‘escheopes’) that had belonged to queen Edith (Edward’s wife), who had received Winchester as her morning-gift, and was dwelling there at the time of the Conquest. Among the other localities mentioned are the curious sanctuary of Godbiete (*domus Godebiete*), at the corner of St. Peter’s Street and the High Street, ‘the king’s “balche[us]” where thieves were imprisoned,’<sup>8</sup> and five shanties (*bordelli*) erected out-

<sup>1</sup> It figures prominently in the first charter of Henry II. The earliest mention of a local trading guild seems to be that of the weavers’ gild (‘Telarii Winton’ . . . pro gilda sua’) in 1130 (Pipe Roll 31 Hen. I. p. 37).

<sup>2</sup> ‘kan len purvoit bevere [*i.e.* boire] gilde markande.’ Winchester custumal in *Arch. Journ.*, IX. 73.

<sup>3</sup> ‘in multis inordinate se agit, et maxime in bibendo [*ita*] ut in Gildis cum ebriosis bibat’; ‘ne . . . amplius in Gilda aut in conventu eorum qui ad inebriandum solum conveniunt bibere audeat.’

<sup>4</sup> ‘Anglici in singulis singulas habebant diocesibus bibitorias *ghild-hus* Anglice dictas.’

<sup>5</sup> ‘aula publica quæ a pоторum conventu nomen accepit.’ A.D. 1191 (Ed. Rolls Series, IV. 404).

<sup>6</sup> The allusion is to *Chron. Abb. de Evesham*, p. 189, paraphrased in *The History of English Law* (I. 95):—‘if an English advocate made his way to Rome, he was like to be told by the pope that his doctrine of episcopal rights was the product of English beer.’

<sup>7</sup> *Domesday Book and Beyond*, pp. 519, 439-40.

<sup>8</sup> ‘le balche’ regis ubi latrones ponebantur in prisone’ (p. 532). It seems to be the



**L**iber de terris Regis red  
dentib; Langabla; .y. Brug  
munt. Sicut solebant Red  
dere. Tempore Regis Edwardi.

**H**ENRIC rex uolens scire  
quid rex Edwardus ha  
buit omib; modis Winto  
nie in suo dñico: Burgensi  
um suoz sacramento hoc co  
pbari iussit. Volent enim  
illud inde pnti habe: sed  
Rex Edwardus suo tempe  
inde habuit. hoc g sacra  
tum factu fuit. de quart. .v.  
.y. vi. Burgensib; meliorib;  
Wint pñte Wille cpo .y. her  
bto camerario. .y. Rad basset.  
.y. Goufrido ridel. .y. Wille x  
pontarchat. hoc autc bu  
genses pacto sacramento: Apo  
ta orientali cepunt inque  
ren ebergingis.



**A**lwinus idestone. tenuit q̄r  
regis Edwardi. ii. domū. reddentem  
tem de langabulo. vi. d. .y. omne  
alia consuetud. regis. .y. rex eam  
tenuit in dñico. q̄ eam tenet fil  
Rad Roselli. q̄a dimissa fuit  
ei a patre. .y. nulla consuet. inde  
unquā reddidit .y. reddit. l. .f.

**E**owinus Godeswale. tenuit  
it. .j. domū. .t. .g. .f. reddentem  
de langabulo. vi. d. .y. recto illa  
domū de consuet. iii. d. .y. om  
ne aliam consuet. in ten. Ric  
capell. com de mēent. .y. nulla  
consuet. inde reddidit n in hoc  
anno. .y. reddidit pannū. .xx. .f.

**B**uman delaforda. tenuit.  
.j. domū. .t. .g. .f. reddentem om  
ne consuet. in eam tenet. .y. ib  
tut saluagi. .y. nulla consuet.  
inde reddidit .y. hanc. Osbtus  
fil. Alberede. p viii. .f.

**L**eurer de essewem. tenuit  
it. .j. domū. .t. .g. .f. reddentem  
omne consuet. q̄. tenet. Osbt  
fil. Alberede .y. nulla consuet.  
unq̄ inde reddidit. .y. de eade  
tra hē herebtus canis. .i. man  
surā que reddit. .xv. .f. .y. nulla





## THE SURVEY OF WINCHESTER

side the west gate by Osbert the son of Thiard, 'for the love of God, to shelter poor folk'; also, in the same quarter, a 'hospital,' on the ditch, before the gate of Herbert the chamberlain, (built) 'for the love of God' (p. 536). We read of stalls ('estals') in the High Street, and of a market 'by the three minsters, which used not to be there.' On the other hand five mints ('monete') in the market place had been done away with by the king's order. Near 'the king's kitchen,' which had blocked up a lane, we find several 'forges,' evidently of recent construction, some of which had taken the place of 'cellars' that existed under Edward.

The mention of the lane, without the north gate, 'by which the burgesses used to lead their horses to water, and which the bishop of Durham<sup>1</sup> has blocked with his house,' reminds us that one of the objects that was steadily kept in view, when making this Survey, was the ascertainment of all 'purprestures,'<sup>2</sup> that is encroachments on the streets and lanes. Where the land thus absorbed is expressly stated to have been the king's, this was quite in accordance with the avowed object of the Survey.<sup>3</sup> The fact, however, is of some interest as showing that the street was claimed as part of the king's demesne. But, strangely enough, in those entries which are of most interest and importance, the offence charged is that of stopping up a 'vicus' or 'viculus' to which no ownership is assigned.<sup>4</sup> On pp. 533, 534, we read that the father of Robert Mauduit encroached on the roadway ('præoccupavit vicum' or 'viculum') in the case of two of his houses, 'for which he was impleaded by Richard de Curci, who was then the king's justice, and he then paid a fine for his offence ("de hoc placito fecit finem") before the king's justice.' Robert's father was William Mauduit, a Hampshire tenant-in-chief<sup>5</sup> and Richard de Curci (who derived his name from Courcy [Calvados] on the Dives) was a tenant-in-chief in Oxfordshire. It seems to have been unknown that he acted as the king's justice, though I have found him, apparently, so employed in Normandy.<sup>6</sup> But this discovery is surpassed in interest by the evidence which this Survey supplies that the presentment of 'purprestures,' and their atonement by fines, can be carried back to the eleventh century. Chipping, an Englishman, had succeeded to two houses in 'Suithelinga Stret,' which his father had held before

'Balchus' of the 1148 Survey (p. 543), where the tenant is said to pay fourpence for it to the king's 'beadle.'

<sup>1</sup> The notorious Ranulf Flambard.

<sup>2</sup> This was the correct legal term, though it is not found in the Survey.

<sup>3</sup> Thus we find entries of encroachment on 'calle regis,' 'terra regis,' and 'vico regis' (pp. 532, 533, 534, 535).

<sup>4</sup> This fact is of some importance in view of a case at the Gloucestershire eyre of 1221. The parson of Seacombe was there presented for straitening the roads on each side of his house and putting up a wall. But as they were not "the king's roads," the charge fell through. Prof. Maitland points out that "there was no purpresture or encroachment on the king's rights, consequently no plea of the Crown" in such a case. (*Pleas of the Crown for the County of Gloucester* [1884], pp. 15, 140.)

<sup>5</sup> See p. 424.

<sup>6</sup> *Calendar of Documents preserved in France*, p. 39.

## A HISTORY OF HAMPSHIRE

the Conquest. 'Between these houses there used to be a passage, which his predecessors have built over; and Chipping was impleaded for this, but he has not paid a fine ('facit [*sic*] finem') before the king's justice' (p. 537).<sup>1</sup> The formula 'has made fine' is dealt with in the *History of English Law* (II. 516) as one of technical importance, but it is not there carried back further than the days of Henry III.<sup>2</sup>

Turning to the personal side of the Survey, its evidence, as observed above (p. 426), proves that 'Henry the Treasurer,' the Domesday tenant in 1086, was already established at Winchester under Edward the Confessor. At the time of the Survey his house in 'Wengenestret' was held by his widow. As we might expect from the date of the Survey, some of the Domesday tenants-in-chief are mentioned in it as living, while others had been succeeded by their sons. Roger Fitz Gerold<sup>3</sup> is entered as holding that valuable property, the Knights' Hall, worth £6 2s. a year; William Bertram, whose Hampshire estate, in 1086, was at Polhampton, is found in our Survey holding a house which belonged to that manor (p. 538); Aubrey the chamberlain, who had also figured among the tenants-in-chief, is entered as holding a house; but of Herbert the chamberlain, as observed above, one cannot speak positively, for he was succeeded by a son of the same name as himself. The mention of Ralf de Mortimer as holding the houses of his predecessor Cheping<sup>4</sup> (p. 537) is of interest, because it has been supposed that no mention of him is found later than 1104. Of those Domesday tenants who were dead at the time of the Survey the most prominent is Hugh de Port, whose son Henry is entered as holding two valuable houses, the one worth £4 and the other £1 19s., while his sisters Alice (Adelis) and Emma de Perci<sup>5</sup> also had houses in the city. Robert Mauduit (*Maleductus*) had succeeded his father in some valuable property on the south of the High Street, worth £6 16s. a year. The mention of Ruald' son of Faderlin, as holding the house which had formerly belonged to Andrebod the moneyer, is of special interest to the genealogist, for he was clearly the son of that Faderlin who, in 1086, held several manors of Hugh de Port in the neighbourhood of King's Clere, and who had also a manor at Woodcote in right of his wife. He was thus the connecting link between this Domesday under-tenant and that Henry Fitz Ruald who must have been his son and who held two knight's fees of John de Port in 1166. These two fees represented the holding of Faderlin.<sup>6</sup> Another name of no small genealogical interest

<sup>1</sup> The purprestures entered in the Winchester Survey should be compared with those presented at Worcester before the justices in eyre in 1221 (*Select Pleas of the Crown* [Selden Society], I. 95-6; see also p. 113), and with one at Northampton compounded for by fine 'before the justices in eyre.' (*Bracton's Note Book*, III. pp. 66-7.)

<sup>2</sup> 'In the thirteenth century the king's justices . . . have an equally wide power of discharging him upon his "making fine with the king." We must observe the language of the time . . . In theory the fine is a bilateral transaction, a bargain; it is not "imposed" it is "made."'

<sup>3</sup> See p. 488.

<sup>5</sup> See p. 438.

<sup>4</sup> See p. 428.

<sup>6</sup> See p. 481.



## THE SURVEY OF WINCHESTER

is that of Herbert de St. Quentin, who held several houses (pp. 534, 538); for he, too, is a connecting link. Hugh de St. Quentin is found in Domesday (fos. 506, 51) holding certain lands in the New Forest district as well as in Dorset and in Essex. The next on record is a Herbert de St. Quentin, who attests a charter of Robert Fitz Hamon.<sup>1</sup> Following this Robert to South Wales, he founded the house of St. Quentin in Glamorganshire. As the Winton Survey mentions 'the fee of Robert Fitz Hamon,' it may have been at Winchester that Herbert's connection with this Robert arose.

Apart from the Domesday tenants and their heirs, we meet with the names of those Normans who had been introduced by Henry the First. Such were Thomas de St. John,<sup>2</sup> whose name was destined to become great in the county, as was also that of Baldwin de 'Redivers,' who had a house in Calpe Street, and whose father had obtained from king Henry Christchurch and the Isle of Wight. Another follower of king Henry was William d'Aubigny ('Albinneio'), who had houses in the High Street, and who founded in England the great family of the earls of Arundel. Of William de Pont de l'Arche I have spoken above, but one may also mention William 'de Hoctona,' who held houses in Wengenestret, Calpestret, and Goldestret, and who seems, from his attestations to charters, to have been constantly in attendance on Henry I. and to have acted indeed as chamberlain to the king.<sup>3</sup> William Fitz Odo was possibly the king's constable of that name who appears at the close of the reign, but this can only be a guess. Of Wigot 'delinc,' however, we can speak more positively; though his name appears in a strange form,<sup>4</sup> he was no other than that Wigot of Lincoln ('Wigoto Linc.') who attested, at Winchester, a charter of Henry I. addressed to the officers of Lincolnshire, himself among them,<sup>5</sup> and who was himself addressed as 'Wigot the sheriff' (of Lincolnshire) in another charter of that king.<sup>6</sup>

Of the reeves ('prepositi') of Winchester the names of four here occur. Æthelwold is mentioned as having held the office under Edward the Confessor, while Richard and Warine (foreigners from their names) and apparently 'Geford' are styled reeves at the time of the Survey. There is mention more than once of 'the reeves,' implying that there were at least two, and a Winchester document of this reign printed by me elsewhere has for its first three witnesses 'Godwine and Godfrey reeves ("prepositi") of Winchester and William Fitz Osbert their clerk.'<sup>7</sup> Among the witnesses to the same document is Ælfstan 'beadle of the street' ('stretbidel'), and the venerable office of 'beadle' occurs also in our Survey as borne by Ælfwine and

<sup>1</sup> *Chron. Abingdon*, II. 106.

<sup>2</sup> Of St. Jean-le-Thomas (Manche) and of Stanton St. John, Oxfordshire.

<sup>3</sup> See the Cartulary of Ramsey (Rolls Series).

<sup>4</sup> It so puzzled the compiler of the Index that he omitted it altogether.

<sup>5</sup> *Monasticon Ang.*, VI. 1272.

<sup>6</sup> *Ibid.* p. 1275.

<sup>7</sup> *English Historical Review*, XIV. 423.

## A HISTORY OF HAMPSHIRE

Briethwine when it was made, and by 'Aisil' and 'Luuing' under the Confessor. It is possible that in some cases titles of office are omitted, for the 'Gisulf' who held two houses in Bucche Street at the time of the Survey, is shown by the later one to have held the post of (king's) scribe, to which, doubtless, he owed his wealth.<sup>1</sup> Richard 'Tailator' derived his name, possibly, from the wooden tallies in use at the Treasury and Exchequer, for a Godfrey 'Taleator' was resident in the city in 1130,<sup>2</sup> and Robert and Gilbert 'Taleator' are found in the Survey of 1148. With these officials, perhaps, we should class the moneyers, of whom several are mentioned. Godwine 'Socche' is entered as 'master moneyer' under Edward with a good house in the High Street, and Mr. Stevenson agrees with my suggestion that he was the 'Godwine Ceoca' whose name is found on coins of Edward and his three predecessors. Ælfwine Aitardessone, 'Alestan,' and 'Andrebod' had been similarly moneyers under the last English king.<sup>3</sup> Another moneyer, Wimund, was dead at the time of the Survey, but Odo is mentioned as then alive. Of these men the name of Andrebod at least is found on coins minted at Winchester.

It is possible, with care, to distinguish residents whose names connect them with offices in the Household. Apart from 'Thierri the king's cook,' who must surely have been the Confessor's *chef*,<sup>4</sup> we meet with 'Audoenus napparius,' whose wife appears as a pensioner, under London, in 1130.<sup>5</sup> The 'Naparius' had charge of the 'napery'<sup>6</sup> in the Household; while the 'Lardarius' or 'Lardinarius' of the Survey was also a Household officer (the Larderer) whose name is found in the 'Order of the King's Household' at the close of the reign, as is that of the 'hosarius,' a bearer of which title occurs in our Survey. Another individual connected with the court who had a dwelling at Winchester was Grimbald the physician, who occurs frequently as a witness to the Charters of Henry I. Although he is not mentioned in our Survey, the later one (1148) shows us Walter de Ticheb[orne] holding a tenement which had been his (p. 558).<sup>7</sup> This later Survey is much longer and

<sup>1</sup> See *Ibid.* pp. 418, 422, 428, for his property. Other documents relating to Winchester officials and townsfolk will be found in this paper of mine on 'Bernard the King's Scribe.'

<sup>2</sup> Pipe Roll 31 Hen. I., p. 41. My reason for this suggestion is that the Pipe Rolls of Henry II. show us a John 'Contrataliator' at Southampton receiving an annual fee from the Crown; but Mr. W. H. Stevenson considers 'tailor' a more probable rendering (as on p. 531 above). The king's household under Henry I. included a 'Tallator regis.'

<sup>3</sup> Mr. Stevenson points out to me that Ælfwine occurs in Hildebrand (p. 457) as a Winton moneyer, and that the name of Ælfstan seems to be found also.

<sup>4</sup> The name, however, is not decisive of his origin.

<sup>5</sup> Pipe Roll 31 Hen. I., p. 143 ('Oinus' was the same name as 'Audoenus,' the French 'Ouen').

<sup>6</sup> *i.e.* the table linen, etc. His office was the origin of the name 'Napier' (which occurs in the Survey of 1148).

<sup>7</sup> Dean Kitchin asserts that 'the city . . . had a chemist' as well as a 'doctor' (*Winchester*, p. 80), and marks the houses of 'Godwin chemist' and 'Lefley Ecreeges doctor' side by side on his map; but as chemists were not so styled till the 17th (or 18th) century the 'Godwin chem' of the Henry I. cannot possibly have been one; and the 'doctor' proves to have been a woman, Leoflæd Ecreeges daughter ('docter'). No attempt is made



## THE SURVEY OF WINCHESTER

richer in description of trades and occupations than that made under Henry I. On the other hand, the earlier Survey is of interest for the large number of curious names borne by the citizens in Edward's days. Brithmar the goldsmith is entered as a resident at that period, and several goldsmiths are mentioned in 1148; but none is found under Henry I. Three tanners, a parmenter, a maker of metal pots ('potarius'), a swordsmith (Brandwirchte),<sup>1</sup> two smiths, a turner, a hay-merchant ('fenarius'), and a laundry ('lauenclaria')<sup>2</sup> are named at the latter date, as well as a 'scaldeator.' We have also a palmer ('palmarius').

Of the streets mentioned in the earlier Survey, 'Scowertenestret,' which means the shoe-wrights' street, became Jewry Street, when the Jews had settled in that quarter, 'Flesmangerestret' (*i.e.* the butchers' street) became St. Peter's Street, 'Wenegenestret' Wongar Street and then the Middle Brook, 'Tannerestrete' the Lower Brook, 'Bucchestret'<sup>3</sup> Busket Lane, 'Calpestret' St. Thomas Street, 'Goldestret' Southgate Street, 'Gerestret' Gar Street and then Trafalgar Street! The dialectical peculiarities of the early Survey are a subject for separate study. One can only observe here that Domesday's 'Eldredus frater Odonis' becomes in the Survey 'Aldrectus frater Odonis,'<sup>4</sup> a form which seems to be paralleled by the use of 'docter' for daughter,<sup>5</sup> and of 'chenicte' for 'cniht,' the second *c* in the two last being the *cb* of Scotland and Germany.

in the present work to give a map of the city temp. Henry I., as there is not evidence enough to make it trustworthy.

<sup>1</sup> Mr. Stevenson has called my attention to these two words, of which the latter, he observes, represents an 'Old English' *brand-wyrhta*, *i.e.* 'brand-wright.'

<sup>2</sup> If, as sometimes happened, 'cl' is an error for 'd,' the word would become 'lavandaria' (a washing-place).

<sup>3</sup> Misread 'Succhestret' in the Record Commission's edition (p. 540).

<sup>4</sup> It is possible that this 'Ode of Winchester' (see p. 427 above) gave name to St. Mary Ode (or Odes) by the South Gate.

<sup>5</sup> 'Leflet Ecregeles docter' (p. 533).

### NOTE ON THE BINDING OF THE 'WINTON DOMESDAY'

*I am informed that the binding of this MS. is considered by experts to be contemporary, and that the stamps prove it to have been the work of Winchester craftsmen. It is further of interest as being one of the oldest stamped English bindings which has survived.*











DA  
670  
H2H5  
v.1

A history of Hampshire and  
the Isle of Wight

*Handle with  
care too worn  
to be rebound.*

For use in  
the Library  
ONLY

For use in  
the Library  
ONLY





UTL AT DOWNSVIEW



D RANGE BAY SHLF POS ITEM C  
39 07 15 12 01 010 5